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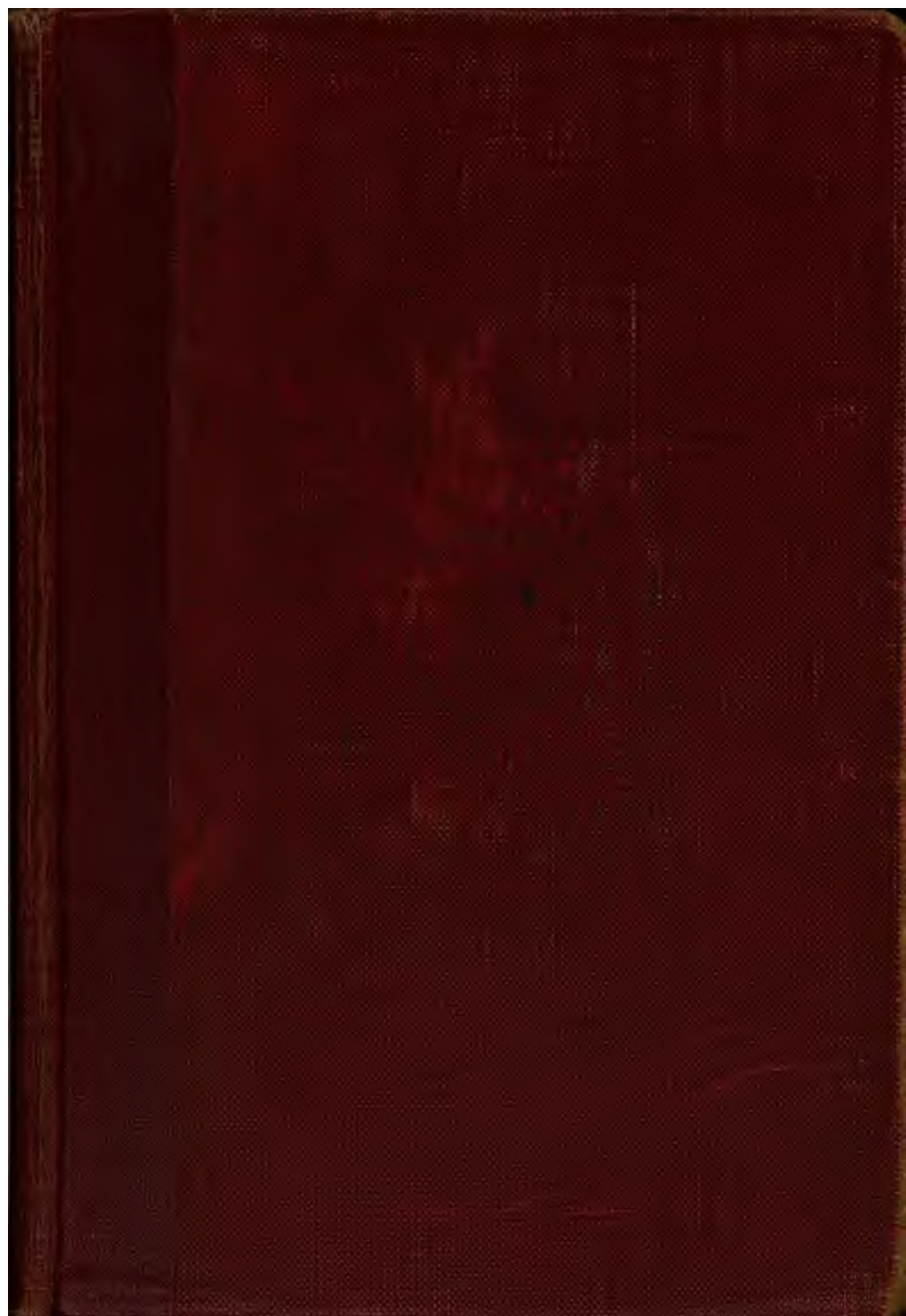
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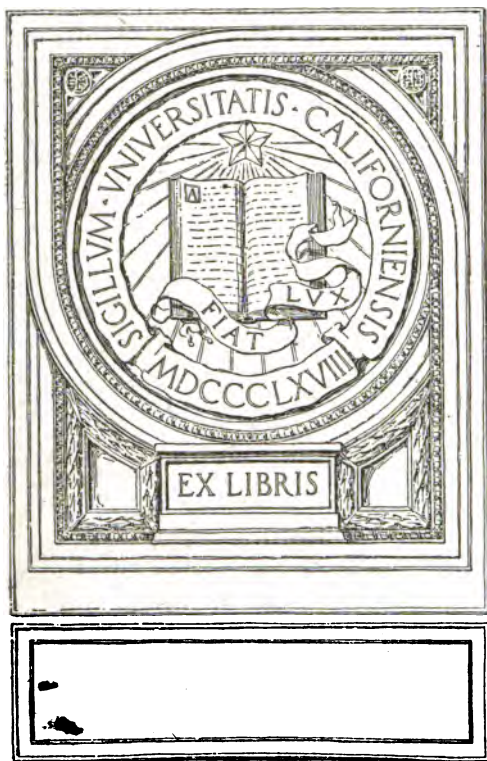
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**SPEECH TRAINING**  
**FOR**  
**CHILDREN**



# **SPEECH TRAINING FOR CHILDREN**

**THE HYGIENE OF SPEECH**

**BY**

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TO THE  
ABSTRACT

TO  
JAMES MILTON O'NEILL



## FOREWORD

It is gratifying to note that those engaged in speech training for children are recognizing the great importance of not confining correctional efforts solely to the speech mechanism. This little volume is an excellent example, which well illustrates this view of the problem. If the numbers of children who lisp and stammer are not to be augmented in future, all children must be properly trained in the development of speech. Unfortunately, most parents are little concerned with the general betterment of speech in their children aside from the riddance of its grossest defects; hence the general low standard of the speaking voice has become proverbial, specially in this country. In addition to giving precise and readily understandable methods for the speech training of children, the authors devote a large portion of their text to the important structural and functional principles that underlie its proper development,

## FOREWORD

The volume is doubly valuable because of its simplicity in presentation, and parents and governesses may easily avail themselves of the work—a fact of great importance, inasmuch as the development of good speech, as the authors contend, rightly begins at home during the first five years of life. The scientific soundness of the subject-matter combined with the practical experience that the authors have incorporated here cannot be too thoroughly commended. It is a very welcome and timely work.

L. PIERCE CLARK, M.D.

## PREFACE

After the many months of labor which precedes the writing of a preface it is a difficult task for an author to evaluate correctly his own work. It is with a degree of hesitancy, therefore, that we presume to point out those fields in which this book seems to us worthy of consideration.

It was undertaken in order to meet the needs of progressive parents for a practical guide for their direction of the developing speech faculties, and the needs of teachers of the early grades who feel the injustice of condemning the child of few opportunities to so great a handicap as poor speech undoubtedly is. For while the child of the truly cultivated and trained parent may afford to stand or fall by what it has acquired in the home, the child who has not this advantage is condemned to advertise himself with each word as the product of less happy circumstances.

## PREFACE

We look forward to a time when, correctly nurtured in mind and body, the child will present himself at school age with undiminished possibilities for good speech. But this will indicate a degree of emotional adjustment not to be hoped for in many generations. In the meantime the teacher has it in her power to correct the faulty as well as encourage the healthy speech reactions.

It must be remembered that speech is the highest and most fundamental human attribute, that without it one is set outside the possibilities of constant communication with his fellows. No system of education is worth while which injures this faculty, or complete which ignores its preservation and encouragement.

It was necessary in arranging such a book to keep well in mind the behaviorist point of view and to attempt by emphasizing the predominating and most disturbing traits to present the types as they are seen in the home and school-room. The discussion of types is meant to be suggestive rather than inclusive and is pre-

## PREFACE

sented with the hope that it may give impetus to a further study of such undoubted authorities as Doctors Adolph Meyer, G. Stanley Hall, L. Pierce Clarke, William White, Smith Ely Jelliffe, Lewis M. Terman, and numerous others, whose names suggest themselves at once to the student of functional illnesses.

We take pleasure in giving credit to Miss Carrie Diebold, who undertook as part of her work in the University of Wisconsin to assist in the devising and trying out of the exercises, and to the many grade and special teachers whose kind and intelligent coöperation has made a thorough trial of the work possible. Our indebtedness is acknowledged with pleasure to those, also, who have come under our instruction at the universities of Wisconsin and Tulane, who by their constructive criticism and unfailing encouragement have given us insight into the abilities and needs of those whose task it will be to direct the work in the schools.

THE AUTHORS.





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**SPEECH TRAINING FOR  
CHILDREN**

**PART I**



## SPEECH TRAINING FOR CHILDREN

### THE HYGIENE OF SPEECH

#### CHAPTER I

#### THE SPEECH MEDIUM

THE history of orthophonics is brief. Like the profession of medicine it lay shrouded for centuries in occultism and quackery. A great many years after the practice of the other healing arts had been put on a scientific footing, the science of speech training and speech reëducation remained in the realm of mysticism. Any one with a good singing or speaking voice was considered by the general public to be equipped *ipso facto* to teach the science of how to sing or speak.

The reason for the persistence of this unscientific attitude is plain. There has been com-



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paratively little research done by the medical man, the physicist, or the psychologist, which is of value to the phonologist, and that which has been done is not easily accessible to the general public. The second reason is that the voice is so fundamentally bound up in the expression and the repression of the emotional life that it resents the intrusion of the scientific attitude.

It is essential that the craftsman know something of the material of which he builds. The goldsmith must know the composition of gold, must know its fusing point, how malleable it is, how much strain it will bear without bending and breaking, and, finally, what is pure and what alloy. He who would make the best design and execution must know, too, whence it comes and something of the history of its mining.

The worker in speech handles a finer medium. The study of the composition of speech is the study of the many reflex and voluntary activities of the human organism. The point at which speech becomes perfect is the point in

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personal adjustment toward which the whole race has striven. For speech is a gage, though not of the number of vibrations to the second, however interesting it may be from that point of view; it is no mere study in physics; it is a test of the psychic adjustment of the individual person to the conditions under which he must live. It is the medium in which he presents himself to the trained listener and says: "Here am I. This is how I meet conditions. This is what I have developed, what breadth, what depth. Here are my aspirations, my un-sleeping desires. This is what my environment has made of me, and I of it."

Even to-day in our busy search for methods time is not taken to go back and unearth and think out the fundamental causes of speech. The structure of speech work is still being built on a wobbly foundation, for less than any other manifestation of human adaptation, it can be considered separately. Our general educational endeavors have been directed too exclusively against the sensory or incoming end of

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the nervous arc. The training must be of the motor end as well. The training of speech thus becomes apparent as an essential part of the educational life, as vital as any study and paralleling in usefulness the opportunities for the acquiring of perspective and the practical lessons of adaptation taught on the playground and by class-room contact.

Familiarity has bred not contempt, but rather a complacent acceptance of the wonderful reflex equipment with which we are endowed. Speech is the capstone of the pyramid, and no working premise is worth while that is not based on a foundation of scientific study.

Hygiene of the emotions—that is, helping the child to acquire the correct values of the affairs of life—and practice in the expression of these emotions are the two fundamental fields of educational endeavor. With the introduction of speech hygiene and training there will come to the educators a comprehension of the foundations underlying the speech reaction and a better interpretation of it as an indicator of social conduct and a thermometer of the adap-

## THE SPEECH MEDIUM

tation of the individual to his social surroundings.

The value of corrective work can not be disputed. But if during the plastic period, in the pre-school, kindergarten, and first and second grades, training were given to set the correctly forming speech reactions and eliminate the faulty, the necessity for a large part of the individual corrective work could be obviated.

In arranging suitable training for the years from four to ten the prerequisite was to see the child and his need from his own point of view. It is obvious that to get smooth, easy coördinations his intellectual and emotional capacity must be considered, his attention held.

Children do not foresee the future. It is only prolonged and repeated experience that gives the necessary perspective to make work for future reward possible. They work for the comfort or pleasure of the present. They cannot be expected to value a study that contains no immediate interest, and if a subject is not presented to them in such a way as to

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hold the interest from task to task, the interest fixes itself on something else, and failure in that task is inevitable.

The work for speech must be so arranged that it not only holds the attention, but attains its end by indirection in order that the automatic functioning of speech may not be interfered with by what Huey has called "mouth-consciousness."

In fulfilling these demands it was necessary to select rhymes that could be repeated without effort and yet were not familiar enough to be trite, for these latter the children say in a sing-song way, which brings no results. Stories had to be written that obtained the maximum amount of vocal response from the child. Plays and games were used as a setting for exercises, some of which had been proven effective in speech work in colleges and universities, and some by teachers of physical education.

It has been our aim to be of practical aid to the progressive parent or teacher not only by putting before them in a suitable form the exer-

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cises that could be of value, but also by arranging the work in many related fields in such a condensed form as to make it accessible.

The fields of psychiatry and neurology, the coördinational activities, phonetics, pedagogy, anatomy, and physiology, psychology, and mental hygiene, all relate themselves to the problem of speech in a very direct way.

But whether we train through the sense of hearing, or of kinæsthesia, or through the will and the reason, speech is the highest expression of all educational and emotional attainment. The training for speech is the training for life.

## CHAPTER II

### SPEECH TRAINING AND GENERAL EDUCATION

**I**T is one of the anomalies of the educational world that speech, the highest development within the possibilities of man, has been relatively ignored. Mary Thompson<sup>1</sup> says, "Among the many ways of estimating character, there is none more sure than that one which might be called the trial by voice."

Even to the untrained listener the voice is an infinitely expressive part of the personality. Without its being realized, social judgment is often based on nothing but the use of the voice.

Whether a child has acquired good or bad speech, has been left to the accident of association. Speech acquired during the first years of life can be thoroughly unlearned only with

<sup>1</sup> Thompson, Mary, "Rhythmical Gymnastics."

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the greatest difficulty, although by an effort it may be much improved. Training for correct speech during the formative years would do more to break down social barriers and eliminate false ideas of class than would any other one field of endeavor. It would remove the handicap under which too many capable people labor. Even grammar does not play so inexorable a rôle. This is often obvious in the deliberate use of slang and poor English by people who are socially acceptable. It is often observed that poorly constructed English and faulty pronunciation do not conceal true culture; whereas, poor tone, inflection, and certain usages of the voice inevitably disclose a lack of breeding. In a democratic nation, therefore, our present neglect of speech training becomes almost anti-social. It is a remnant of autocracy whereby we say that the child has only a right to that which it inherits.

Speech was developed in response to the emotional needs and their realizations. Since it is through speech mainly that the emotions are expressed, the control of the emotions



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through the control of the voice is a fundamental attainment, but this process has become automatic and thus has lost a value that it would have, could it be made at once available for deliberate use. Training in the expression of the emotions is of value because the child must learn to do with deliberate intent what it cannot do impulsively. It must not only be taught that a snarl is ugly and impolite, but also how to replace the ugly, animal-like sound with a pleasant one that will stimulate its attendant emotion.

The truth cannot always be told of our emotions, no matter how much value the emotion may have. It is obviously not an act of kindness to shiver with the cold or some receptive person, who otherwise would have felt warm, may also begin shivering. The expression of nausea in public is utterly taboo, although its primitive value is untold. We may not even use in speech those "vomitive sounds" which the young baby is said to have and which are indicated in the primitive alphabet. The fundamental necessity of speech and expres-

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sion thus becomes identified with good breeding and even human loveliness. The physical assumption of the expression of an emotion will often produce the emotion. Even a forced smile stimulates the correct internal secretions, as enforced sadness will stimulate tears, and in response to the internal secretions happiness or real sadness will result to a certain extent. Putting on a brave attitude in the face of disaster has led many to meet even martyrdom with joy. ✓

Speech is a reaction to the environment as surely as the withdrawal of the hand from a hot stove and must be adequate not only to the individual but also to the social needs, else the individual must suffer. It is, indeed, a thermometer of the emotional reactions, and the emotional reactions prove to be a compilation of many little habit reactions. To reeducate the incorrect reactions as they show themselves in speech is to do what our educational systems have aimed to do since the world began. No system that hopes to cover the field of education can ignore speech.

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X "Language," says Terman, "is the main vehicle of mental progress." It is the main vehicle of the acquiring of perspective, because through it we learn the experience of others. The information that makes education possible is given in the medium of speech or of the pictured speech, that which we call writing and print. Even the great virtue of this visible speech, its permanence, does not give it more importance than the value of the immediate speech.

Why, then, has it acquired in our schools an emphasis relatively much greater? Because spoken language is so vital to the perpetuation of the race that it must, of necessity, be developed in the very first years of life. Writing and reading can so easily be put off indefinitely that it is necessary to over-emphasize their value in order to make the arduous task of learning at all acceptable.

John Arrowsmith says: "A child's natural method of thought-expression is by speech, which should be full, direct, simple and copious. . . . Reading and writing, the modern

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method of thought communication, has been stressed too early in the life of the child.”<sup>1</sup> It would be against all the teachings of musical pedagogy to permit the child to learn to play the violin, yet to wait for him to attain adulthood before he is taught the correct position of the bow. How much more absurd to wait until the child has obtained speech by imitation before he is trained in its essentials, for he is then self-taught in his most vital activity.

The most vitally important years for the training of speech are the first five years of life, during the period in which the child is normally acquiring it.

In the period from five to nine the habits are being set in the mechanism, the formation of speech is still in progress but the process is not yet complete. Training, then, is still fraught with the possibilities of good results and, for the same reason, with greater danger if unwisely and ignorantly undertaken.

From nine to fourteen is a period of read-

<sup>1</sup> “Possible Lines of School Reform,” in “Child-Study,” December, 1917, Vol. 4.

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justment, of marked growth and abnormal balance of the different functions and activities, and is, therefore, a period of great psychic danger to the individual. Speech correction here becomes relatively a more delicate process and a more difficult one, as the habits are beginning to be deeply graven.

From fifteen to twenty is what has been called the last period of grace, but muscular and nerve habits retained until this time are as much more difficult of eradication as is the straightening of a bone.

Since growth ceases only with death, even the adult is not hopeless of modification, but the effort required is so much greater, the will must be so much stronger, the habits of character must be so much more auspicious, before good can be accomplished, that by comparison he is relatively uneducable. However by persistent effort and a thorough determination even the most handicapped adult can make of the voice an instrument very nearly adequate to his emotional needs.

The training, or rather the lack of training,

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which is given to the speech faculty during the first years of life, need hardly be pointed out. With the exception of teaching the baby the first words "bye, bye," "mama," and "papa," "baby," and a few others, there is none given. The child hears, retains, and repeats the words of our vocabulary and in this manner attains language.

What he does get in the home is a great deal of speech suppression. "Do not talk so loud," and "do not talk so much," are perhaps the admonitions which he hears most. His obedience to the first command, with regard to degree, depends on his coördinational ability, and in the first years this ability is very poorly developed. Loudness and softness is a matter of delicate adjustment and can only be attained automatically after years of training. To be sure, the child does often talk loudly or softly as directed, but the voluntary control of the degree of loudness is an ability developed much before its automatic control. The child's normal method of expressing intense emotions is with an over-adequate amount of voice. In

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order that this automatic control may develop, it is, of course, necessary that the voluntary control be exercised frequently. No objection can be made to corrections given at the right time, and that is when one is alone with the child and when the corrections are made with this end in view. They must not be given too frequently.

"Do not talk so much," is obviously for the benefit of the elders. It would not be recommended that any child be permitted to talk to the exclusion of adults. Since adults must live with children and since children must adapt themselves to the world, it is excellent training that they learn to adjust themselves in this respect as well as others. They should not, of course, be permitted to monopolize the conversation when there are guests present, but the adult should take care that he is not taking advantage of his position of authority to keep the child from talking simply because he himself wishes to talk.

That "children should be seen and not heard," is pernicious doctrine. No child can

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learn to speak who abides by it. The processes of speech are composed just as definitely of motor output as of nerve intake, and no child is justified in obeying the command. This is true in school as much as in the home.

The teacher, as does the parent, deals in degrees and takes advantage of her position to enforce a quiet that is not advisable. Specially is this true in the first two grades of school.

Too much emphasis is put in the class on the correction of pronunciation and grammatical construction. In the early years of life these are relatively unimportant faults, because example and the criticism of associates will correct them to a greater extent in the years between nine and fifteen. Joseph H. Choate, a man of acknowledged breadth and insight into social needs, said that "the whole matter of pronunciation is of relatively small practical importance in most cases."

Teachers of physical education have emphasized the fact that a few moments daily of a corrective exercise will offset the incorrect use of the muscles even when the incorrect use is



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for the rest of the twenty-four hours. A coal-heaver who will over-correct the use of his muscles for five minutes daily may regain the straightness of his back. Even when speech is incorrectly used for the greater part of the day, fifteen minutes' daily drill will not only train the sense of hearing, but will stimulate the forming of correct habits and will also slowly overcome the incorrectly formed habits. Normal speech corresponds to the straight back; abnormal, to the deformed back of the coal-heaver.

The emphasis placed on dressing the drill for speech as attractively as possible is based on the fact that boredom makes atonic the general muscular use of the body, and that lack of interest soon ceases to be a negative state and becomes an active condition of dislike; hence restriction of the vocal apparatus follows. The sloughing off of our own personality, which takes part in reading rhymes as well as in playing games and in reading or acting stories, reduces the element of timidity and self-consciousness and, therefore, of strain.

Interest and direct work for letter position

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are mutually exclusive with the young, and the latter, except where it is undertaken to correct abnormal conditions of malformation and mechanical lisping, is apt to make conscious a *process which should rightly be automatic*. This automatism rightly extends to the breathing apparatus as well, and the exercises for this function must be put into a form that attracts in itself and distracts from the object of the work. In adults, where the vital coördinations are set and a great deal of change cannot be accomplished for evil, direct control may be used, but is not necessarily preferable. Working by indirection may be said to be the fundamental rock on which speech training for children is built.

## CHAPTER III

### THE MECHANISMS OF SPEECH

#### THE ORIGINAL ENDOWMENT

**A**T birth the human infant has stored in his nervous system the patterns of certain primitive expressions that have been of service in the preservation of the race. These are limited, and express what may be assumed to be displeasure and its opposite, a more or less negative state, contentment or acceptance. The former is shown by cries and movements of a variable nature, the latter by quiet or by slightly accelerated breathing, accompanied by some movement of the limbs and trunk. Similar endowments are the possession of nearly all of the animal kingdom. The endowment that sets the human apart from the other animals is the *possibility* of the large, very nearly limit-

## THE MECHANISMS OF SPEECH

less, vocabulary of sounds that we call vowels and consonants. ★

This ability would not develop were it unaccompanied by the opportunity to hear spoken language, as is demonstrated in the totally deaf, who must be given speech artificially; for speech, as we know it, does not "come by nature." It is a selective and adaptive process, during which the child chooses from the tremendous vocabulary of sounds and unlimited range of expression those which will be understood by the people with whom it is surrounded as representing certain ideas and emotions. x

Thus the child must select from the phonic reactions at his command the one adequate to the situation; that is, he must express his emotions with the accepted tone and inflection and pitch, and, by thus relearning in the kinæsthetic sense this appropriate physical speech reaction, crystallize and relearn the emotion to which he is giving expression. By giving motor expression to the primitive feeling tone back of speech, the paths, figuratively speak-

## SPEECH TRAINING FOR CHILDREN

ing, along which the feeling travels are deepened and completed.

### THE MOTOR MECHANISM

The mechanism necessary to accomplish this is elaborate and complicated. It is composed of hundreds of parts controlled by nerves, which are directed from a special area in the brain, called the area of speech. For purposes of description the mechanism may be divided into two parts; first, the muscles, bones, and other integuments that make up the chest, larynx, mouth, and head, all of which are used in the production of voice and articulate speech; and, second, the speech area of the brain and the nerves that convey to the muscles the impulses that originate in the brain.

### THE MOTIVE POWER

From a physiological point of view, the first part of the mechanism, composed of muscles, bones and integuments, may be further divided into four distinct parts; first, the motive power, composed of the diaphragm, ribs, inter-rib mus-

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cles, which together make up the thorax or chest, and the enclosed lungs, and the windpipe leading from the lungs to the vocal band.

There are twelve pairs of ribs, which are joined together at the back with the bones of the spine. The first ten pairs of ribs slant downward and forward as they run around the body. The first seven ribs are fastened to the breast-bone by a piece of cartilage, thus giving great flexibility; the rest of the rib is of bone. The eighth, ninth, and tenth ribs are fastened to the seventh rib. The upper ribs, especially in the male, are not easily moved, as there rests upon them the breast muscles and fat. Hence, it can be seen they would not be so flexible as the lower five ribs.

The breathing apparatus consists of an airtight box called the thorax, the sides of which are composed of ribs. Between the ribs are muscles which are covered with fat and skin in such a way that no air can gain entrance through the walls. At the bottom of the thorax is a fanshaped muscle, domed upward into the chest. This muscle is called the dia-

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phragm. Inside the thorax and resting with their lower part against the diaphragm, are the lungs. Into the lungs run the bronchi, which, joined, form the trachea, or windpipe, and convey the air to and from the lungs.

The act of breathing is carried out by the co-ordination of more than two score muscles, the twelve pairs of internal and external rib muscles, twenty-four on each side, the neck muscles, the chest muscles, the diaphragm and the abdominal muscles.

The mechanism of their use is as follows: the upper rib being fixed by the neck muscles, the inner rib muscles contract and the ribs are rotated outward and at the same time the front ends are lifted, thus pushing the breastbone away from the backbone, and increasing the space in the thorax.

The main muscle, however, used in the expansion of the chest cavity is the diaphragm. It is a thin, powerful muscle, domed upward so that it projects into the cavity of the chest. When this muscle contracts, its fibers are shortened and it becomes less domed, becomes al-

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most flat. This increases enormously the capacity of the chest.

The abdominal muscles play an important part in the act of breathing. When the diaphragm contracts, it forces the abdominal organs, just below it, out of place and they, in turn, force out the abdominal walls. It is the resilience of these muscles, acting through the abdominal organs, which helps to force the diaphragm back into place. Thus there is added to the resilience of the diaphragm the elastic force of the abdominal muscular wall to aid in forcing the air from the lungs. In times of stress, as in screaming or making a sudden, loud, violent noise, the abdominal wall actively contracts and helps force the diaphragm upward.

Poise thus definitely concerns the voice. If the abdominal walls are relaxed and the abdominal content constantly misplaced, free and unstrained use of the diaphragm is impossible.

The lungs may be compared to a rubber bag; they communicate with the outer air by way of



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the windpipe. When the chest, which is air-tight, becomes enlarged, the air rushes into the lungs, expanding them so that they fill the space formed by the enlargement. Thus, the act of getting the breath into the lungs is an active process. When the diaphragm and the inter-rib muscles are relaxed, the air is forced out of the lungs. This is a passive process.

This, then, is the mechanism of breathing; the lower ribs and, to a lesser extent, the upper ribs, together with the diaphragm, are used to expand the chest cavity and the air rushes into the lungs. By the relaxation of the lower rib muscles and the diaphragm the air is forced out.

There are two types of breathing, that which is used to carry on the life processes, called unconscious breathing, and the other type of breathing, which is used for speech and is only partly conscious. In speaking more breath is taken at a time, but the interval between breaths is longer than in breathing for life processes. Breathing for speech has also a different rhythm from breathing for life.

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The former is a specialized type of breathing, and for this reason must be given special attention by the teacher of speech.

The rhythm of breathing for speech must be so deeply ingrained in the reflex mechanism that as soon as the idea seeks expression the entire use of the mechanism will be so synthesized that it will move smoothly; it must be so deeply ingrained, either by nature or, in case she has failed, by training, that it will be maintained no matter what the emergency. Since it cannot be foretold with accuracy whether the habits will hold in an emergency, training should be given that will at least partly insure their holding and will give the person control enough and knowledge enough to regain the use of the mechanism in the event of its being suspended.

## THE VOCAL APPARATUS

The vibrating part is composed of the elastic tissue that forms the vocal bands and the cartilages and muscles that compose the larynx in which the vocal bands are contained. The larynx forms the lump in the throat that is com-

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monly called the Adam's apple. This can be felt by placing the fingers on the throat about an inch below the chin. It is composed of cartilages, three single and three in pairs.

The thyroid cartilage is the shield-shaped cartilage that forms the front of the larynx. The cricoid is the ring-shaped cartilage that forms the lower part of the box, while the epiglottis is the fan-shaped cartilage situated at the top of the larynx, which prevents food particles from entering it during swallowing. Situated on the inner side of the upper posterior border of the cricoid cartilage, are the arytenoid. They are paired and are shaped like a three-sided pyramid, to the posterior side of which are attached the muscles which control the movements of the vocal bands, and to the anterior side to the vocal bands themselves. Anteriorly, the vocal bands are attached to the thyroid cartilage. The larynx is hung in the throat by muscles, one set of muscles attaching it above to the hyoid bone, another set attaching it to the breast-bone. During the act of swallowing or making a high note the larynx rises.

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When a low tone is made, the larynx is pulled downward.

The inside of the larynx is quite small and is divided into two parts by two bands of ligaments which project across the cavity of the larynx and are called the false vocal bands. These ligaments have nothing whatever to do with the production of tone or voice. Just below these false bands are the true vocal bands, composed of elastic connective tissue. In the adult, these latter are not quite an inch in length, in the child they are less than half an inch in length, and hardly a quarter of an inch wide. These vocal ligaments are moved by the arytenoid cartilages, by which they are attached to the larynx.

The movements of the vocal bands are of two kinds. First, for quiet breathing the vocal bands are opened in the shape of a V, with the closed part forward. When tone is to be produced, they are drawn across the larynx, partly obstructing it. When the air is forced between the vocal bands, it sets them vibrating, thus producing the tone. The sec-

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ond action of the vocal bands is to tighten and loosen. This is done chiefly through the action of muscles that pull the arytenoid cartilages backward, stretching the vocal bands that are fastened to them and causing the change in pitch. [The tighter the vocal bands, the higher the pitch.] In the child the pitch is always higher than in the adult. Loosening is done by muscles that are attached to the vocal bands and pull the arytenoids forward.

The fine muscles that control the vocal bands are called the intrinsic muscles of the larynx, while those that control the movements of the larynx as it moves upward or downward are called the extrinsic muscles. The intrinsic muscles of the larynx are capable of very fine actions. It has been estimated that where training has been given the vocal bands can be changed as little as one sixteen-thousandth of an inch.

## THE ARTICULATING ORGANS

Of the articulating organs the tongue, soft palate, muscles of the cheeks, and the throat,

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form the active elements, while the teeth and roof of the mouth are the passive elements.

The primary function of the tongue is mastication and swallowing. From a biological point of view its action as the chief organ of articulation is a luxury. It is composed of muscle fibers, which run in three directions, up and down, from side to side, and from front to back. This arrangement of the tongue gives it its mobility. It undergoes change in width, length, and thickness with great rapidity; it has been calculated that in one minute of ordinary speech the tongue makes over four hundred definite movements. A precise use of the tongue, therefore, is required if good speech is to be obtained.

As speech is developed, the letters "t," "d," "l," etc., are made first because the front of the tongue is easier to use than the back of the tongue with which such letters as "k" and "g" are made. The development of the muscle fibers of the tongue is necessary for the easy and smooth production of sounds. This is lacking not only in those who have a deficiency

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of mental development, but occasionally for some unknown cause in those who have a good mental development.

Precision in the use of the tongue is to be obtained in normal children not by practice of the individual sounds, but by practice of the use of words in sentences, by the force of good example, and good social hygiene.

The soft palate is a muscular curtain, which hangs in the back of the mouth. In front it is attached to the hard palate, which is composed of bone and separates the anterior part of the mouth from the nose cavity. Posteriorly, the soft palate has an appendage called the uvula. The soft palate can raise and separate the back of the nose from the mouth. This it does for every sound in English speech, save for "n," "m," and "ng." For these sounds the soft palate drops, and the sound passes through the nose.

The muscles of the cheeks and throat contract and relax in such a way as to change the shape and size of the mouth and throat and so help in the formation of sounds. The teeth

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and the roof of the mouth are acted against by the tongue in articulating. These parts and the hard palate are called the passive organs of articulation. The great part these organs play in the formation of articulate speech is shown in the defect resulting when cleft palate is present and when the teeth are missing, as in children or old people.

### THE RESONATING CHAMBERS

As the primary vibration of the vocal chords is very faint, resonating chambers are needed to reënforce the tone. The mouth and throat are called the active resonating chambers, because they can change position and form to meet the needs of speech.

The passive resonating chambers include the nose cavity and the cavities of the head and face bones that communicate with the nose, and the air in the trachea and lungs. To take advantage of this latter, the larynx is moved up and down in such a way as to adjust the tone to the column of air. The muscles of the throat and cheek change in such a way as to



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form resonating chambers to the various tones, and the air in the nose also acts as a resonator.

### THE COORDINATION OF THE MECHANISM

It is easily seen that articulation requires a great precision of muscular action and this must be coördinated with breathing and with the tone production. The mechanism extends from the top of the head to the pelvis. It involves literally hundreds of muscles, all of which have to act together with a precision and sureness equaled only by the action of the muscles of the eye.

At birth this use is poor, the tones are crude, raw, and uncontrolled. As the child grows the mechanism is controlled and articulation learned.

It must be noted that every part of the vocal mechanism, save the vocal bands, is used for other purposes than for the production of speech or tones. The diaphragm is used for life breathing and the tongue for mastication and swallowing. Parts that are often used for

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other things, parts that have other duties to perform, must be trained to act at certain times and in certain ways in response to stimuli which originate in the area of speech.

There must be perfect coördination of the breathing apparatus with its two score muscles and the larynx with its extrinsic and intrinsic muscles. The vocal bands must be stretched to just the correct tension in order to get the desired tone, the diaphragm and inter-rib muscles must relax, and the abdominal muscles must contract in such a degree as to force just the right amount of air between the vocal bands, and the larynx must be raised or lowered in order to give the proper resonance. If too much air is used a breathy tone results—quite a common failing in children's voices. If too little air is used the tone is weak. A wonderful degree of coördination is required if good, pure, normal tone is to result. ✓

Many of these coördinational possibilities are present at birth, but *they must be developed*, they must be fixed, they must be adapted to the use of normal speech with its changes, its

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nuances, its variations from the instinctive cries of the suckling child.

### THE NERVOUS MECHANISM OF SPEECH

The central nervous system through which the voluntary, and some of the involuntary or semi-voluntary, muscles, such as the diaphragm and the vocal chords, are governed, is composed of the brain and the spinal cord and the nerves running therefrom. The brain is divided into two distinct halves. These halves are easily distinguishable on examination. The spinal cord is also, anatomically as well as physiologically, divided into two halves.

The cortex of the brain is composed of cells from which come the impulses that result in voluntary action, as well as the thoughts and emotions and imaginations that make up the sum of the activities of the mind of the normal person.

The different areas of the cortex, the outside or bark of the brain, have been investigated, so that it is known approximately what functions certain cells perform. It is a law of

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the nervous system that the action of a nerve cell remains constant—a sensory cell always receives sensory impulses, light, taste, or pain; a motor cell sends out motor impulses; an associational cell reports the sensory impressions and makes of them a perception upon which the mind can act.

### THE MOTOR AREA

There is an area about midway of each half of the brain that is called the motor area. From this area arise the impulses that govern the voluntary muscles of the body. In this area are set the nerve cells that govern the muscles of the feet, the legs, the trunk, fingers, hands, arms, eyes, neck, muscles of the diaphragm, vocal bands, and tongue muscles.

✕ The nerve cells that govern the right side of the body are situated in the area on the left side of the brain; while those that govern the left side of the body are on the right side of the brain.✕ The nerve fibers from these cells run through the brain down to the upper end of the spinal cord, where they cross to the opposite

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side. They then run down the spinal cord and are relayed out to the nerves that run to their particular muscles. It is from this motor area of the brain that come the impulses that set in motion the muscles that go to make up the mechanism of speech.

### THE PREFERENTIAL SIDE

While the brain is a dual organ, both halves do not function equally. This inequality of functioning is demonstrated by the fact that *in each individual there is a preferential side*. This is commonly designated as "right-handedness" or "left-handedness," preferably right-sidedness or left-sidedness, as the ability to use one side better than the other is extended to the entire body as well as the hand. Occasionally in the case of left-handed people through training of the right hand a state is arrived at in which one side is used apparently as well as the other, or nearly enough, so that to the common observer the sides are equalized. But this state of ambidexterity is apparent rather than real, as there will always be found some very

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highly specialized processes, such as cutting with scissors or threading a needle or kicking a ball, for which one side is used *in preference* to the other.

The impulses that go to the voluntary muscles come from the motor area of the cortex of the brain. Automatic actions, such as life breathing, do not come from the cortex. These automatic actions, probably being developed long before the voluntary, are governed by the medulla, situated at the base of the brain.

A little higher is the big nerve cluster known as the thalamus, and the lenticular and caudate nuclei that govern other automatic processes, which once were voluntary, but became in time automatic. Such an action is walking.

## THE RESPIRATORY CENTER

For breathing, since many muscles are used, extensive coördination is needed, and all these coördinations must be under a single directing head in order to have uniformity of action. This direction is maintained through a cluster

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of cells in the medulla, called the respiratory center. From this center go out impulses, fifteen to eighteen times a minute, that cause the muscles to contract and the air to rush into the lungs. This respiratory center, while situated in the medulla, is under the control of the cells of the cortex and, when the need for speech comes and a different type of breathing is needed, an area within the motor area of the cortex takes control of the respiratory centers.

When these impulses have become automatic the lower centers in the brain may take over the function of sending out impulses necessary to speech, but during training these impulses come from the motor area of the cortex.

### THE ASSOCIATION AREA

The sensory nerve cells receive the impressions as they come from the periphery through the sensory nerves. Certain parts of the brain contain the cells that record the sensations that come from the retina; certain parts, the cells that record the sensations that come from the ear, but these sensations of light or darkness,

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sound or silence, mean nothing unless there are around them some associations. The sound is heard and immediately is associated with a pistol-shot or a train or a crying baby or the sound of the voice of a friend, and these associational images that make possible the understanding of the sensory impressions have also their definite locations.

### THE SPEECH AREA

This is what happens in speech: when tone or articulations are made there are laid up in the brain the muscular patterns necessary for the movements. The area that functions thus is called the motor-speech area. It is not to be confused with the area from which the ordinary motor impulses go out to the muscles, but it is "the memory center of the motor innervations necessary to form the appropriate sounds or words with which we have learned to express certain concepts."<sup>1</sup>

<sup>1</sup> Howell, Wm. H., "Text Book of Physiology," page 220.



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### KINÆSTHESIA

The sense of kinæsthesia is of the greatest value to the individual person. It is "a consciousness of the amount or quickness of muscular exertion involved in the performance of a given act,"<sup>1</sup> and makes possible the retention of the patterns of muscular movement. Only with the aid of this sense is a repetition of a given movement possible, and the impression may become so ingrained that the act can be repeated without thought. Walking is learned with great trouble and conscious effort, but finally, with the aid of this sense, the movement is so well learned, the patterns so well laid down, that the lower nerves can take over the patterns that the cortex has established and function independently.

This area where the kinæsthetic images are stored is in reality an associational area, just as are the areas that contain the associations of sight and hearing. And the kinæsthetic area wherein are stored the motor images, acting

<sup>1</sup> Appleton's Medical Dictionary—1916.

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with the associational areas of sight and hearing, constitutes the speech area, or the speech center, as it is sometimes called, although this term is felt to be too circumscribing.

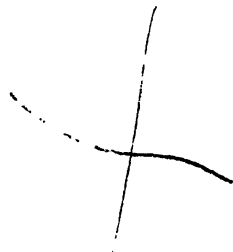
It is true that the voluntary muscles of both sides of the body are governed from the opposite sides of the brain, but the associational areas, in which are situated the associations of hearing and sight and motor images used in making speech and writing, show a very curious phenomenon. <sup>x</sup>Contrary to expectation, they are situated on one side of the brain only and on that side of the body opposite to the preferential hand; that is, in right-handed people the speech area is on the left side and in left-handed people it is on the right side.<sup>x</sup>

From this area arises the impulse for speech and arises also almost the whole sum of our intellectual life. If this area is destroyed, we cannot understand what is said, cannot understand what is read, cannot use either spoken or written language, and thus are almost completely blocked from communication or understanding.

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### THE COORDINATIONAL AREA

Somewhere in this motor associational speech area there exists a coördinational area where all the hundreds of muscles that act in unison are given the impulse of right action. The impulse goes out to the primary motor areas. They, in turn, send it to the muscles of the entire speech mechanism. Until a child has these speech reactions deeply implanted in his brain he is not yet free from the danger of losing his speech, either through deafness or through some nervous or emotional shock that may destroy or inhibit the correct use of the speech area.



## CHAPTER IV

### THE COÖRDINATIONS

**S**PEECH is a series of delicate motor co-ordinations. It may be defined as a rhythmic coördination of certain of the accessory and fundamental muscles.

The fundamental muscles are developed first, but while many of the fine or accessory muscles are utilized from earliest infancy, it is usually in such acts as are of biological necessity, such as swallowing, suckling, cooing, etc. Such as are safety reactions, for the preservation of the race. The control of accessory muscles not in this group is developed later, and these later acquired motor characteristics probably utilize the channels already established in the motor area of the brain by the fundamental muscles in such acts as kicking, turning, crawling, pulling, breathing, violent crying, etc.

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Speech, therefore, is directly aided by the training of these fundamental muscles. This is amply demonstrated by the results obtained by such training in the speech of those in whom the accessory muscle development has been delayed.

Exercises for the development of these fundamental muscles and for rhythm not only develop the muscles involved, but are also of direct developmental value to the motor area in which originates the kinæsthetic sense. A consideration of the training of this sense is essential for those who have to do with the direction of the education of the child, as rhythm, poise, breathing, walking, and speech all involve its use.

Dr. Dearborn calls this sense<sup>1</sup> "the most basal and important of the senses," and adds that "without it, no infant could become more humanly efficient than a plant."

The kinæsthetic sense is probably developed very early in the life *in utero* and is encouraged

<sup>1</sup> Dearborn, George Van Ness, "Moto-sensory Development," page 1.

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by every movement of the mother while the infant is being so carried in the pre-birth period and after birth in walking, jogging, turning, and by the child itself in kicking and crying.

Jogging and rocking in the cradle, especially if the cradle is not too smooth in action, and all such exercises are to be recommended rather than condemned as long as they are not used to the extent of interfering with the digestive processes of the child. This is directly against the statement so commonly made that "the infant is a vegetable and should live the life suited only to a vegetable." Such reasoning does not take into account the developing sense of coördination and locomotion, and is therefore incomplete.

With the introduction of walking, the simple rhythm is deeply fixed in the organism. The rhythm of walking is perhaps the most firmly set. It is the most easily and generally responded to, as will be seen in the uniform sense of movement with which people respond to march music. Rhythm is so fundamental

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that even attempts to perform mechanical actions irregularly show "a persistent tendency to revert to action regular in time and intensity," according to Dr. Ishiro.<sup>1</sup>

Defects due to lack of rhythm may, therefore, be said to be very fundamental, and it is undoubtedly true that where this sense is lacking to any degree it is exceedingly difficult to inculcate after the early years of life have passed. The belated development in this field is common. A kindergarten teacher recently stated that at entrance approximately one quarter of her pupils could not march to simple time and that relatively few of them, perhaps five per cent., could skip with both feet. Although no data were kept on the subject, she was under the impression that about one-half of them could skip with one foot. Mrs. Florence H. Kirk<sup>2</sup> says "that children skip before they march." She emphasizes need for training in, and opportunity for, marching; "The import-

<sup>1</sup> Dr. Ishiro, "Researches in Rhythmic Action." Yale Psycho. Lab.

<sup>2</sup> Kirk, Florence H., "Rhythmic Games and Dances for Children."

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ance of marching for young children cannot be too highly emphasized. That it supplies a real need of children's growing vitality is shown by their delight in following one another about the room, keeping time to music, clapping, waving arms, hopping, skipping, running, etc., as the rhythm and tune suggests."

Speech involves the kinæsthetic sense to a great degree. Talking has been computed to require many hundreds of fine coördinations to the minute; without the use of rhythm this would be obviously but a fine jumble of unintelligible sounds.

As would be expected, the sense of rhythm is deficient to a greater or less degree in persons having any form of stuttering or stammering. The teacher of a special class for stutterers reports that approximately ninety per cent. of her pupils cannot march to simple time. Among young stutterers it has not been our experience to find any one who could be said to have the natural ability for patting simple time, and among adult stutterers, contrary to the general opinion, very few are adepts at



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dancing. Specially is this true of waltzing, where the rhythm is more complicated.

X The value to the stutterer in the exercises for rhythm of the fundamental muscles lies in the fact that proficiency in one field of co-ordination influences the other fields of co-ordination. This was demonstrated in the Yale Psychological Laboratory in a series of tests by Dr. Smythe Johnson. Dr. Johnson says in this report,<sup>1</sup> "The effect of practice on speed and accuracy of voluntary movements was not limited to the member which was exercised." It is unfortunate that conditions do not admit of more simple dancing in the early grades and that the greater part of rural communities have been deprived of the opportunity through puritanical ideas of repression.

The coördinated use of the accessory muscles will readily be seen to put much more strain on the nervous system than does the use of the fundamental muscles. This is true even in adults, where long practice has given great automatism to their use.

<sup>1</sup> Johnson, Smythe, "Experiments in Motor Education."

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Compare, for instance, the strain of the muscle coördination involved in piano practice with the coarse muscle coördination involved in pulling a lever of a machine. Other elements intrude in the comparison of any two types of work, but perhaps the difference would be perceived more easily by a comparison of five hours of constant walking and five hours of constant talking. The former would be possible to a great many people, the latter would be impossible to all except the rarest and most highly trained speakers.

Until the eighth or ninth year the child's muscular mechanism is ill-adapted to the use of these accessory muscles, even in acts which the adult performs with perfect ease. Such simple things as grasping a pencil, using a knife and fork, buttoning small buttons, stepping over door-sills, moving around furniture, will require much more effort on the part of the child than would seem likely.

In free play few of these coördinations will be observed unless the use of them is stimulated by adults. The continuation of school activi-

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ties, for instance, may be thought desirable and thus introduced at home. Training in the ordinary home is toward undesirable precocity along this line. Too many small children, especially girls, are given scissors and encouraged to sit still and cut papers, or given a pencil with which to draw. While this arrangement disposes of the child for a few moments, it is, nevertheless, at the expense of the young child's muscular development. In an excess of the outpouring of the racial instinct, little girls are often encouraged to sew for their dolls when they are still much too young. It would be better if more singing to the dolls and rocking the dolls and similar activities were encouraged.

The most popular games of normal children during the first seven years are those which require the use of the coarse muscles, such as running and hopping. Even in marbles the fine muscular movement involved in shooting the marble is small in comparison with the amount of coarse muscle exercise in the leaning and bending and kneeling involved. Among

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city children, where the opportunity for running is limited, games requiring finer movements tend to appear earlier. It is against this evil, in part, that the playground systems were inaugurated.

In the arranging and placing of school work a certain amount of attention is being given to the muscle and nerve strain involved in the different types of work included in the curriculum. But it is not nearly enough in proportion to the importance of the subject. The fine muscle strain used in writing is under the grave suspicion of doing harm to children in the kindergarten and first grades. Many educators would eliminate writing in these two grades were it not for the demand of the parents that they be able to see the results of the school work. Naturally, the results for which they look are the accomplishments that they acquired in their own first years of schooling.

The forms of both printed and written letters could easily be acquired by the use of sandpaper letters similar to those in the Montessori materials. A wise teacher was recently observed

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supplying tiny pieces of wood to the children, with which they wrote their names by forcing the pieces of wood on to the lines of large printed letters. This simple expedient is not without value if it releases the young child from one single bit of muscle or nerve strain. Not only would such a release of the nervous activities be valuable, but the tactile training added would be of great benefit also.

The manual arts hold wonderful possibilities for the development of the young, offering, as they do, the opportunities for large and varied movements and of respite from sedentary school-room occupations. But while the old punch work and fine paper-mat work are no longer seen in our schools, there is a tendency to bring into even lower grades some of the arts requiring the dexterity of the fine muscles.

Some rearrangement in the order might be made with advantage. Weaving on the small loom, which is work usually given in the later grades, if at all, might reasonably be placed before sewing. The swing of the shuttle stick and the banging of the loom would be move-

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ments which would benefit the young to a much greater extent than the exact placing of a needle in even the simplest seaming or embroidery. This fact is utilized in the training of the mentally deficient, who are able to profit by weaving at a very early stage in their development.

The work for boys is rather better planned than that for girls, including, as it does, the coarser crafts, and the movements involved in the ordinary bench work are ideal for the child, from the point of view of the student of muscular coördination. The essential in the selection of all work for children is that only large rhythmic movements be required at first ~~and that the addition of finer movements be~~ permitted to develop later, and never forced or encouraged against the natural tendencies of the child, or even permitted before the coarse coördinations are mastered.

## CHAPTER V

### THE PLASTIC PERIOD

**B**ECAUSE the phenomenon known as a baby is relatively common we have not been prone to observe its behavior with a spirit of inquiry, but have accepted its varied reflex activities as meaningless outpourings of excess energy. It is against the teachings of modern psychology to see these movements as purposeless. Educators and parents must come to realize the value of the racial inheritance shown in these instinctive movements.

Even during the third day of life violent crying, caused by piercing the finger to draw blood for laboratory-test purposes, was hushed by lifting and carrying.<sup>1</sup> Such reaction must have some definite value in the developmental

<sup>1</sup> Blanton, Margaret Gray, "The Behavior of the Human Infant During the First Thirty Days of Life." "The Psychological Review," Vol. XXIV, No. 6.

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life of the child. The theory that the child is "distracted" by being carried does not answer, as it is essential in order to sidetrack an emotion that the one coming in must be stronger than the one that it displaces, and this quieting is apparently in response to the primitive pleasure felt in thus exercising the kinæsthetic sense.

The human infant is born with a virtually complete reflex equipment for speech. Even during the first days of life his range of vowel and consonant sounds is comparatively large. Nevertheless, from the hour of birth he does not confine himself to attempts to express himself in tones. He expresses pain and discomforts of various sorts not only by cries, but also by the use of arms, legs, facial muscles, abdominal muscles, and possibly abdominal content.

By the end of three months it is quite probable that he has in his "vocabulary" all the sounds necessary for English, although he does not use them in the proportion and with the pitch and inflection that distinguishes speech



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from crying. By the end of the first year he has not only a full equipment for the formation of English speech, but also has in his sound vocabulary, according to some authorities, certain primitive sounds, such as the vomitive sound, which our language does not include. This does not mean, of course, that he can use or even repeat all the words of the English vocabulary, but rather that at some time or another he can be heard to make sounds approximating the vowel and consonant sounds in our language, in so far as this is possible without a full set of teeth.

✧The first three years of life cover the period of the greatest value in the development of the individual. ✧ Probably in no other period of the same length does such rapid development take place. The postponement of definite training beyond this formative period is educationally very unfortunate. ✧

The number of years in which there has been "schooling" for the majority of the people is relatively short. Only during the last thirty years has there been education in schools for

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children under seven, but even now education of children below five years is left to the home, the only exception being in day nurseries, where the educational methods are in no way changed.

In the pre-school period training should differ radically from that given in public schools and kindergartens. It should be adjusted to the intellectual and emotional possibilities of the child under five. It should have as its object the direction of the emotional expression and control. It should have as its object the direction of the emotional and coordinational rather than the intellectual life. A brief survey of the yearly percentage of the population breaking down from causes related to the emotional life will soon bring conviction of the need of such a change.

But this will necessitate a change in the attitude of the parents, a change in the relative value of commonplace things, and a willingness to see the infant as something other than an object to be kept clean and "out of mischief."

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From the beginning the infant needs more exercise than it commonly gets. Were he only permitted, he would work off some of his motor energy in kicking, which he now frequently puts into crying. Bedclothes and covers should never be neatly and closely tucked in. Covers for the baby's bed should be at least one yard longer than the bed and should be permitted to lie in loose wrinkles and folds, which will give perfect warmth and at the same time perfect freedom for kicking. The order of the room is absolutely immaterial when it collides with the welfare of the infant.

Freedom from all restricting clothing is very vital. A great many of the most experienced physicians now advise leaving off the abdominal binder, which has been in general use for generations. Those who still use it often admit that it does not stay in place, and therefore can do very little good. Umbilical hernia, which it is supposed to prevent, is not prevented by it, and there can be no doubt that if the binder were arranged tightly enough to pre-

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vent a hernia it would also prevent the acquisition of correct breathing habits.

Exercise can be given in a number of ways. Walking with the child in arms is perhaps one of the best for young infants. This should, of course, be done at the pleasure of the parent or nurse and not of the infant. If the theory is advanced that the child will "cry for it," it should be remembered that it also cried for food and yet it is not customary to refuse it food. The truth is that the child probably cries for walking more when it does not get it occasionally than when it does. Walking with the child should be done at stated intervals, just as feeding is, and should not be used as a resort to stop crying when for some reason it becomes inconvenient to adults any more than feeding is resorted to for the same purpose. The pleasure felt by the infant in this, it must be remembered, is developed in response to the kinæsthetic sense. An attempt at the suppression of the use of this sense occurs at birth under the ordinary routine of the nurs-

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ery, as it is customary to permit children to lie many hours with only a slight change in the general position of the body.

The child should also be held across the knees, face downward, when it will be found that after the first few days of life, he will support his own head many seconds and even minutes at a time. He should be given the opportunity to do this in order that the back and neck and chest muscles may be exercised. He may be undressed and placed in a crawling position also on some flat surface, the right hand of the nurse supporting the abdomen, the left hand lightly supporting the head. Held in this position, crying will result, but this crying is not harmful and will cause him to make definite movements of all four limbs and his back.

It will also be found even during the first days of life that infants will become quiet when slight pressure is exerted on the chest, head, hips, or back. To utilize this tendency the third form of exercise may be the passive one of gentle rubbing and pressing, and after the second week, if the physician in charge agrees,

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the warm tub may be followed by a cool, not cold, sponge bath, which, of course, should be given very little at a time and immediately wiped away with soft toweling.

During the third month the child should have a bar suspended lengthwise of the crib in such a way that he can conveniently grasp and pull on it. He should also be encouraged to pull on fingers extended to him and thus support his back as soon as he volunteers to do so. Authorities agree, however, that he should not be permitted to support his weight on his legs until much later.

For the development of the coarse muscles toys should be furnished that will bring the child's easiest coordinations into play. Large balls of such a size that they must be lugged in the arms, little wheelbarrows, with heavy blocks with which they may be loaded, for the exercise of the back, low ladders for climbing, and platforms on and off of which the child may crawl and even fall, should all be supplied in a well regulated nursery. If these things seem crude in comparison with the other fur-

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nishings of the house, it should be remembered that the coördinational activities of the child are as much more vital than the esthetic senses as is the digestion to an appreciation of color.

If the home is to be truly a place for the development of the young of the race, the time has come for an adjustment of the attitude not only of the parents, but of the general public as well. For many years the statement has been made that the home was organized for the child. It has been accepted that the whole organization of society was built around the child as the unit. Pedestals and vases, polished and precious tables, and expensive china, rugs too valuable to walk on, and floors too slippery, all belie this contention.

Not until the entire idea of interior decorating and, indeed, the architecture and disposition of the rooms of the house are readjusted to the needs of the young of the race, will the home be an ideal place for their rearing. There must be a change in the policy, which obtains in most homes, of allotting from one to three rooms to the general utility needs of

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the family, whereas, the child, at most, has one room only to be used for sleeping and usually shares that with some other child or, possibly, which is a worse condition, some ~~other~~ adult.

If it is impossible for the baby to play on the sod, as it is in the winter time, he should have a thickly carpeted room, where the soft conditions of the sod are duplicated, and in which the furniture edges and corners are padded in such a manner that he will have no fear of them. The cleaning of such a room in these days of vacuum machinery does not constitute a serious question. Certainly the price of such an equipment will be more than saved in the added health of the child. Stiff, solid shoes should not be provided until the third year.

The good that many little patients receive in the country in summer comes to a great extent from the freedom from waxed floors and must-be-avoided corners of furniture and from the muscular development that comes with running on soft sod, uninhibited by the fear of falls. To understand the muscular tension necessary for a child to run over an ordinary,



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hard, bare floor, it is only necessary for an adult to try to run over a walk slippery with ice. If every movement made under such conditions was with the additional fear of striking sharp table corners and chair rockers, the wonder would be that children reared under such barbarous conditions could walk or talk at all. If, in addition to this, was added the constant dread of corrections from the persons who are most loved, it will readily be seen that the child is working under a great handicap in the ordinary conditions of the home.

The child should be held absolutely to the best standards of his age, but to his mental and muscular age, let us say, rather than his chronological, and he should never, of course, be held to adult standards. The child is unable to handle the furnishings of a house as an adult does. Adults, through mistaken ambition for the child, often demand the same perfection that they demand for themselves and for other adults. To scold or nag a boy of eleven, for instance, because he does not handle his fork with the proficiency with which his

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father does, falls just short of cruelty in proportion as the scolding and the nagging is small or great.

The general coördinations are not fully adjusted until the period of adolescence is passed. A child cannot, without a great deal of thought, shut the door each time as softly as does an adult. Shutting a door, which seems such a simple task to an adult of ordinary training, is really a complicated motor deed, employing the use of a high degree of inhibitory power; that is, the ability to stop the action of the door is the largest factor and requires developed coördinations.

Of course, it is not advised that a child should never be told that it is not good custom to slam a door, but he should never be corrected for a lack of coördination beyond the powers that are to be expected of him. The fact that he does so at times or can do so when reminded does not alter the fact that as yet the continued exercise of these inhibitory coördinations are beyond him. A certain amount of noise is to be expected of children. It is not

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necessary that they beat drums or pound the piano in order to develop; useless noises, which they often make for the sheer pleasure of hearing, may be curbed without harm to them for the welfare of those adults with whom they must live, but those noises which have to do with the coördinational powers should be tolerated until that age is reached when the child will normally outgrow them.

What would be a careless breach of fine feeling in an adult is simply a failure of muscular coördination in a child, and to nag or scold a child, indeed to hold him responsible as an adult is held responsible, is directly against the attainment of the very thing desired. It is directly against the good of his general coördinational development. It is certainly directly against the welfare of his speech.

## READING MATTER AND SENSE TRAINING

Among the most urgent reforms that would relieve the strain on the centers of motor coördination is the discarding of the use of reading matter before the age of seven. Parents

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are even worse offenders in regard to this than are our educators, supplying picture books with descriptive print to children as young as two and a half years. \*Even toy blocks with small letters should be avoided, and, when they are presented to children by uninformed and well-meaning friends, all print should be pasted over, preferably with different colors, from which the child may get some sense training in the place of letter discrimination.\* There is little object in supplying a child with print at such an early age. This is one of those conditions in which adults do not discriminate between the desirable powers of childhood and the mature abilities of themselves.

In the kindergarten and ~~first~~ grade reading has no legitimate place, and the same may be said of writing. Neither of these arts will have arrived at enough perfection to be of value in the attaining of information, and this is an excellent time for the cultivation of the auditory and nasal nerves and also of the tactile sense.

Very few children are taught a fine discrimi-

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nation in the use of the senses other than those used in hearing music. Virtually no tactile training is given, except to the deaf, and training of the olfactory sense is not given at all. The odors tolerated by the public, as well as the harsh and raucous sounds in the majority of voices, would be incomprehensible in a few generations if really efficient training of these senses was given. These odors and sounds, which we now treat with such indifference, are not without their harmful potentialities, as the secretory glands do discriminate even if we do not, and the nerves respond although the individual person be unaware of the portent of either of these distracting elements.

Training the tactile sense in the size and weight of blocks and the shapes of various small objects would also bring into play some training of the kinæsthetic sense, and any training of the kinæsthetic sense is of great advantage in developing the speech area. It must be remembered that discrimination in the field governed by one sense makes for discrimination in all, and the earlier these dormant fac-

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ulties are cultivated the better it will be for the faculties of speech and sight, which might not only gain by training in the other fields, but which would also be spared many distracting and destructive influences.

### THE PHYSICAL NEEDS <sup>1</sup>

All students of child life now feel that there are no "innocent" childish ailments. The child must be protected from measles, whooping-cough, and colds. ✕Common colds, especially, which have such an ill effect on the articulatory organs, should be vigorously excluded.✕ It is not generally known that common colds are contagious, but there seems little doubt that they are not only contagious, but that there may also be carried at all times in the mouth and possibly the nostrils the germs necessary to produce a common cold whenever conditions are favorable to their development. Continued common colds have a very bad effect on the

<sup>1</sup> For a comprehensive study of the hygiene of the child in all its phases, the reader is referred to "The Hygiene of the School Child," Dr. Lewis M. Terman, Houghton, Mifflin Company.

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mucous membrane of the mouth, the nose, and the throat, as they may also have on the middle ear and on the resonating chambers in the bones above and below the eye sockets. The resonance and, consequently, the beauty of the voice is greatly impaired by those inflammations, which cause thickening of the mucous membranes themselves.

No child, especially if he be of the temperament of which defective speech may be expected, should be submitted to either eye strain or what we might call ear strain. The general public is conversant with far-sightedness and near-sightedness: very few realize that there are parallel conditions in the field of hearing. Thus, a child will be tested for hearing within a few feet of the tester and pronounced not deaf, whereas, standing across the school room the child will prove quite unable to hear. Gross injustice is often done to the child of whom this is true. The constant strain attendant on defective hearing is very great. It may be mentioned in passing that the speech of these children is rarely distinct.

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### THE EMOTIONAL NEEDS

One of the most vital factors in the development of the child is the sloughing off of the spiritual dependence on the family. It is very hard for the parents of a child to realize the necessity of its being permitted to grow up and take its place in the adult world. The child is soon to take its place as an individual in the life of the community, and any love on the part of the parents that prohibits this from occurring freely and easily can only come under the category of selfish indulgence.

White says,<sup>1</sup> "The excessive affection which holds many families together is often purely of this selfish kind, seeking not the independence and self-sufficiency of the loved one." The spirit of sacrifice, which is or should be the fundamental on which parental love is built, has here ample opportunity in which to develop itself.

For the neighbors and friends to be able to say that mother and son are "just like sweet-

<sup>1</sup> "Principles of Mental Hygiene," William A. White.



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hearts," is a serious accusation against the true love of the mother. She cannot absorb her child's life and at the same time have him fulfil the demands of the world of whose society he is a member, and the spiritual weaning time, from three to six, is the time in which she may demonstrate to the world her wisdom as well as her unselfishness in the rearing of her child.

Safety lies for the child in the society of other children. William H. Burnham<sup>1</sup> says: "It is better for a child's mental health to eat and play and work and study with other children than alone or merely with adults. . . . The only child in a family, and others who have lacked opportunity for social development, should be given special training."

If the child does not adapt himself readily to life with other children, every effort should be made to persuade him to do so. He must not be permitted to withdraw into the world of books and day-dreaming. He must be taught

<sup>1</sup> "Mental Health for Normal Children," "Mental Hygiene," January, 1918, Vol. 2.

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that "actions and not dreams are the province of his age." Maudsley says, "One of two things must happen to an individual in the world if he is to live successfully in it: either he must be yielding and sagacious enough to conform to circumstances, or he must be strong enough and possess the extraordinary genius to make surrounding circumstances conform to him." To live successfully, it is not always well that he do the latter even if he is able. Adjustment to the exigencies of life is the great and fundamental law on which all human intercourse is based, and all human happiness. The child cannot dominate the world. If he could, it would not bring him happiness, because it would not bring him friends. The earlier he is taught the simple—in the beginning—practice of looking at his needs from the point of view of society, desiring for himself only those things that would be reasonable if demanded by the whole race, and accepting those things that it were not well should be changed, the greater will be his opportunity

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for normal emotional life, and healthful spiritual development. Normal speech is only present where these two attributes are present.

### THE FIRST QUESTIONS OF SEX

With regard to the first questions of sex, no distortions should be resorted to. Some analogy of the fertilizing of the flowers may be used as long as it suffices, but all questions must be answered truthfully. This is true not only with girls, but boys. Even with frank sex enlightenment as to the carrying of the infant by the mother the little male is left in doubt as to the part he is to play. And the first questions as to this part should be answered frankly.

The bond between the child and the first instructor in sex is often very tender and beautiful if the adult has had the cleanliness of mind necessary for frankness on his own part.

The abnormal parts of sex should not be told at this time. No mention of diseases and distortions is permissible. And while every precaution should be taken to see that children do

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not touch their genital organs, they should never be threatened with insanity in case they do so. The reason for this is obvious. It is not the truth. Insanity rarely results from masturbation.

A vital rule is that a child should never sleep with another person either of his own or the opposite sex. This, irrespective of the relationship between them. Children should not sleep even in the room with their parents, after the weaning. Parents rely on the lack of observational powers of their children in a very foolish and unjustified manner. Too numerous to mention are the cases of neurosis that come to the attention of every neurologist and psychiatrist which may be traced directly to the breaking of this essential rule.

## DISCIPLINE IN THE HOME

The matter of discipline in the home is, unfortunately, more often a matter of convenience than of deep thought-out policy. The child is usually corrected for doing those things which irritate or disturb, or in some way come

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in collision with the interests of the nearest adult. And, unfortunately, the thing for which he is corrected is often the thing which he should have done.

It must be remembered first that "good, not obedient, children" are desired. Self-control and not willingness to be dominated are the traits that should be cultivated. Two children living under the same régime, perhaps the children of the same parents, may still be so vitally different in their mental characteristics and emotional reactions that very rarely can they live under the same laws. A child utterly lacking in initiative and daring should not be punished for the same thing for which a mischievous child, who is continually doing something different, should be punished. Children, it will be found, really have not only a deep-seated sense of justice, but also a rarely nice discrimination in its application.

The habits of scolding and nagging in which so many parents indulge are the foundations on which are built the nervous disorders of a great many children. The nervous child of the

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nervous parent is so not necessarily because he has inherited some predisposition to a nervous disease, but because he is often in no small degree the victim of the nerves of the parents.

Rarely does scolding or nagging remedy any fault on the part of a child. In fact, too much solicitude and interest, whether pleasant or unpleasant, only adds to the strain under which the child moves. Such an atmosphere is especially harmful to the child prone to difficulties of speech. The coördinations of speech are very minute, very rapid, and very difficult to the growing child, and no tension should be added to that under which a normal child is already laboring.

## THE PRINCIPLE OF SUBLIMATION

The whole foundation of social life is built on the principle of sublimation. An activity outgrown or stripped of its usefulness cannot be suppressed, but must be directed into other channels. The prohibition of a fundamentally useful tendency will not be tolerated by the needs of the individual. Dr. William H.

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Burnham says,<sup>1</sup> "Repression means a short circuiting of the nervous reaction and the dissipation of energy within the nervous system itself, instead of normal expression in coördinated activity." Something must be substituted that will fill the need. Too many children live under a constant prohibitive régime. Too many children have their lives regulated by the negative instead of the positive. They hear too much "do not" instead of "do." This is detrimental, because activity is growth. Practically, the child acts for itself and quits one thing only to pick up another. But if its judgment happens to be faulty or too many things are on the taboo list, "do not" must again be substituted for some instigation to activity, and the round begins again.

Expression rather than suppression, sublimation rather than prohibition, must be the watchword of the person who would avoid the fostering of the neurotic and abnormal in the child. It should be deeply graven on the hearts

<sup>1</sup> Burnham, W. H., "Mental Health for Normal Children," "Mental Hygiene," January, 1918.

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of all teachers and parents that children are in a process of growth and not a completed article, that adult tasks and occupations are not suited to them, and that adult standards do not apply to them. They are not supposed to make the same repressions that the adult must, nor to have the same delicacy of movement.

Such tasks, both in and out of school, must be given the child that will only be just a little harder than he can reach and that do not demand too much effort. Repeated failures foster the feeling of inadequacy, which shows its head in all, or nearly all, the neuroses. It is an attitude, a state of mind, out of which the child must be led at all costs. It is a disease that feeds upon itself and is often not modified, but intensified, by the advance of years. It manifests itself in speech as well as in general behavior. It affects all the coördinations. It inhibits the play of the higher mental faculties. It limits and twists the individual and turns him in upon himself, where he is forced to live in visions and wishes and vain longings and desires.



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This tendency is most easily combated in the very young. If he is not made an omnipotent ruler over the family in early years, he is not so likely to have an exalted opinion of himself and his value to society, which is sure to receive a decided check when he compares himself and his attainments to those of other children. If he has acquired this attitude, his omnipotencies must be diplomatically, but thoroughly, removed in his own mind, as it has been in reality. He should be taught that the standards of other children of his age are the standards by which he will be judged, and that he can meet these standards if he puts forth the effort; that it is not his pencil that keeps him from writing well, or the weather that makes him late for school, or the teacher's partiality that gives him low grades, or his health that accounts for his lacking, but his own attitude of mind and his own unwillingness to make the correct effort for a given situation.

He must be made to face reality, not to shirk it or explain it away or deny its exist-

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ence, and those obstacles that cannot be removed must be viewed from a different point, must be given perspective. He must learn that life will rarely adjust itself to him, and that, since either he or life must be yielding, it must be himself.

## CHAPTER VI

### THE DEVELOPING SPEECH NEEDS

**D**URING the first three years of life is taken the first step in speech, but the accomplishment is poor, the memory associations are weak, the reproduction is faulty. The child is busy learning many other lessons, notable among them, that of language construction, and his task is further complicated by his introduction to an overwhelming number of unfamiliar objects and sensations. Nevertheless, at the average age of three years a child should be able to communicate by means of spoken language.

From three to nine are the great years in which the speech habits, already partly acquired, must be set. It is most unfortunate that this period is so exclusively given over to the construction of speech and so relatively neglected as to expression.

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The different periods of speech development have been catalogued by numerous writers from the point of view of their various interests. For the training of the speech faculty, perhaps the most practical division is: first, the period of reflex and instinctive cries; second, the period of language sounds without an association of ideas; third, the period of language sounds with an association of ideas, but without sentence form; and, fourth, the period of sentence building.

In the first two periods relatively little can be done to influence speech in the slightest, except the training of the general coördinations, which has been spoken of under a different heading. It must be remembered, however, in the second period that the primitive alphabet contains more sounds than are incorporated in the English language. It is only through hearing good models that the selective processes can be correctly directed. The child must not be misled into selecting un-English sounds, nor is it well that he should hear those dialects of the English language bristling with harsh conso-

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nant sounds, which restrict the throat. Example is the one way in which influence can be exerted at this period.

It is the transition *from* the period of meaningless speech, *through* the period of conscious control of speech *to* the period of automatic control, that is fraught with the most subtle dangers to the speech powers of the child. "Speech, correctly, is purely automatic. That is, the idea is supplied through the senses and comes forth from the motor centers, which control the mechanism, without any conscious effort on the part of the person speaking. The development of this automatism must not be interfered with, and so it is quite vital that no attention be called directly to speech during this period of conscious control.

According to Trettien,<sup>1</sup> the period during the last quarter of the first year and the first quarter of the second year is a time of great delicacy of the speech mechanism. It is the time in which the development of language may be re-

<sup>1</sup> Trettien, A. W., "The Psychology of the Language Interests of Children," Pedagogical Seminary, Vols. 11-12.

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tarded. He says, "The child may even lose some words which he has acquired, due to teething and learning to walk. This is especially marked if there are complications which drain the physical energy or direct the attention along other channels." He also says that "one observer reported that when the baby was learning to walk during the tenth, eleventh, and twelfth months, the speech output was somewhat cut down."

It is a matter of practical experience that physical activity relieves temporarily the necessity for speech. This would be true in a very special way were a child in the stage in which speech is merely one of a number of forms of motor output, and not an expression of ideas. Such a reduction of speech activities, however, would not indicate that walking and other motor activities were to be discouraged. It would be probable that, were the child not interfered with by some of the diseases of childhood during or immediately after this period had passed, the speech output would regain all that it had lost, and more too.

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Talking, of course, may be encouraged, if the output is lessened, by simple questions and repetitions, always with the thought in mind that the mechanisms of speech are never to be made conscious. It is also to be kept in mind that it is useless to stimulate, or to attempt to stimulate, the expression of abstract ideas in a child of this age. The child's words at this stage are concerned with his own activities. "Baby go?" "Eat?" Or often the use of the word "Baby," may mean, "May baby have?" or "May baby go?" or "Will you give it to baby?" These are typical examples of the language used at this period. The voice at this period is often exceedingly expressive and the use of the facial expression very interesting. The single words and "imitation sentences" are often wonderfully and beautifully inflected.

But with the construction of sentences, a period of monotone enters. "Baby want to go home." will be said very nearly in one tone. The reason for this probably lies in the fact that the construction of sentences is an intellectual attainment; whereas, inflection is a mat-

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ter of the emotional output and is very slowly adapted to the intellectual field. Conscious control, or rather, let us say, deliberate use of the speech faculties, is, therefore, necessary in order to inflect a sentence until it becomes automatic. Inflection of the sentence is probably beyond the ability of the child's observational as well as his reproductional powers.

### BABY TALK

The good or harm done by baby talk has been discussed at great length by many writers. While negligent lisping may be the survival of baby talk in a great many instances, as pointed out by E. W. Scripture,<sup>1</sup> it may also be that it is a symptom of unweaned emotional life rather than a direct outcome of carrying over a bad habit.

Baby talk in the first stages of the baby's life can certainly not be very harmful and might be really helpful if not continued beyond that period. By baby talk is not meant the usual distortions of English, but diminutions and ab-

<sup>1</sup> "Stuttering and Lisping."



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breviations. Certainly a baby in the babble stage of speech will suffer no harm if the adults babble back to him. It is the prolonging of any stage, either in the field of speech or in the emotional life, after its legitimate period has passed, that is harmful to the child.

Adults are prone to forget that speech with the young child is not a fixed product. It is continually evolving from the mere use of the primitive alphabet, which Taine has called "the raw material of the language," into complete articulate speech. This evolution must not be hampered by the desire, either conscious or unconscious, of parents and friends to keep the child in the baby stage in which he is so sweet and pleasing. Fortunately, in most cases they are unable to do this whatever they wish, as the child hears conversations between adults, carried on in a more or less correct form, and he is stimulated by this condition.

Yet, while a child who is precocious will be slightly stimulated, the child who has a neurotic taint, poorly directed, may form an individual language, which he will retain as long as he is

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permitted to do so. The mother who has allowed this condition to occur should realize the serious harm she has done or permitted to be done to the child and force herself to refuse to answer any question or demand in which an attempt at normal speech is not made, and she should see that others surrounding him do the same. If this direction is taken early enough the speech may easily be made normal. If not, the child should be taken to a teacher trained to correct defects of speech or, if none is available, to one trained to give oral speech to the deaf.

Trettien<sup>1</sup> says of those children who have a residue of baby talk left in their speech, "Later, when the child goes to school and begins to notice that it is lacking in this respect, it becomes the object of mockery by other children, and this inheritance from the nursery may have an injurious effect on its speech and even on its character and its future life."

This is, if anything, an understatement

<sup>1</sup> Trettien, A. W., "Psychology of the Language Interest of Children," Pedagogical Seminary, Vols. 11-12.

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of the condition that occasionally occurs. Marked cases of this sort have the appearance and behavior of the grossly retarded and are by the untrained often so considered.

The mental development is markedly hindered by such speech, because a large percentage of the learning of a child is acquired through speech. Added to this is the inability to join in games and do the ordinary rough and tumble things by which children undertake to educate themselves and each other.

That these conditions are mostly the outcome of selfish inconsideration on the part of the parent can usually be demonstrated. One interesting case, which we have studied carefully, was that of an American boy who had evolved an entire language of his own, understood only by his mother and sister, but who had been taught to speak a foreign language with perfect precision.

Scripture says that the children of reformed stutterers may even receive from the harsh voices of the parents what may become in their own speech the foundation of stuttering. Cer-

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tainly, a clearly enunciated speech, with well modulated and inflected tone, is not only of artistic value to the growing speech of the child.

Good speech in those around the child is of great value. There is little doubt that the speech of the child depends extensively not only on the good sense, but also on the speech, of the parents and early associates.

### SPEECH OUTPUT

The customary statement that children should be seen and not heard will, on the slightest study of the question of speech, be seen to favor only the adult who wishes to do the talking. Forcing stillness and quiet on a child is purely consideration for the adult and not for the child himself. During these early years not only have the higher inhibitory powers not been fully developed, but the practice of the muscular functions is so fundamental a need that inhibitions of them from the outside are fortunately almost impossible. If the adult would spend more time in the cultivation of

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the habit of contentment on his own part and willingness to let the intellectual development of the child proceed, a great deal could be done with ease which now cannot be done even with the most persistent nagging. The feeling that the quiet child is the ideal child must undergo a radical change if the children are to have an opportunity for the development and growth that is their right.

From three to six years is a period of very rapid growth and adjustment. Speech output during this time is most essential. Trettien quotes appalling statistics on the number of words used. According to him, one observer counted 9,290 words used in one day by a child of three years and six months. This does not mean, of course, a vocabulary of this size, as many were repetitions. Another observer counted 15,230 words in a child of the same age, and 14,996 in a child a year older. Silence, therefore, enforced on a child in this stage would be very detrimental. Speech should most emphatically be encouraged, and kindergartens that discourage the use of speech

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and demand silence on the part of children under six are more harmful than helpful, no matter what other attributes they may have.

Further than this, the child should be given material out of which to build speech. A large vocabulary should be used in his hearing. It should never be simplified except in the giving of commands and the asking of questions requiring an accurate answer. It has been calculated that there are in the neighborhood of three hundred thousand words in the English language. None of us commands even approximately all of them, but a larger vocabulary attained early would be of great assistance in the nice use of words in later life. It would also afford for the child new letter combinations on which he could practise.

A child's pronunciation should never be corrected if the word is difficult or unusual until the child has passed the eighth year. The exception to this would be, of course, in the use of incorrectly acquired words, such as "bup" for syrup, or "be'me" for bread and milk. It is not likely, however, that these habits would

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be established if the adults surrounding the child held to the correct pronunciation and refused to be dictated to by the child in the use of common words. While children are not to be held to adult standards, adults most certainly should be.

## CHAPTER VII

### UNHEALTHY TYPES OF SPEECH REACTION

**I**N any study of the defects of speech the individual person, rather than the defect itself, must be considered, for not only do the symptoms in each case differ, but the underlying causes and the individual temperament as well. At the same time some characteristics are present in all cases which afford a more or less typical and constant picture. The final diagnosis and treatment is a specialized field of neuro-psychiatry, and the following discussion of the various defects is merely a guide for the parent or teacher who may need to decide which child should have special hygiene or receive special consideration.



## SPEECH TRAINING FOR CHILDREN

### STUTTERING

No one will take issue with Dr. Makuen, who has so aptly said that "the time to cure stuttering is before it begins." The term stuttering is used to include stammering, since the genesis of both is quite probably the same, as are also the rules laid down for the guidance of those suffering from both troubles. It may be defined as a breaking of the rhythm of speech, due to a blocking or inhibiting of the muscular coördinations.

Stuttering should never be considered as a bad habit, or even as a disease entity, but rather as a symptom that may be the result of any one of several conditions. It is the most serious defect of speech and is always superimposed on the neurotic constitution or temperament.

Since stuttering may have its origin in any of several different conditions, the diagnosis of each case must be made a separate study and the immediate treatment conform to the findings. However, the general rules of mental and physical hygiene that apply to one may ap-

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ply to all, by virtue of the fact that they aim at the reëducation of the temperamental defect, which remains virtually constant in its character. The whole mental fabric of the stut-terer is askew, and only those methods of treat-ment are of permanent value that aim at the fundamental failing and unearth the trouble lying at its root. Then may be undertaken the reëducational work necessary to alleviating the symptom.

The general attitude of society toward the stutterer is one of very deep concern to those interested in mental hygiene. The stutterer is the perpetual butt of jokes and songs and imitations. Very rare indeed is the season that does not produce one comic opera in which the stutterer is the clown; and when it is taken into consideration that the stutterer is the vic-tim of a severe nervous derangement, the se-riousness of this will at once become apparent. Stuttering is quite serious enough without this added handicap.

Stutterers may not enter the United States as immigrants, as they are considered potential

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paupers. Until the present war emergency severe cases could not enter the service of the army or navy. By the very nature of their disease they are naturally excluded from a large number of professions. Few of them have been successful actors, and very few successful singers, since, although a great many of them are fond of singing, the control of the diaphragm is not sufficient for that purpose.

On the other hand, stutterers have become men of prominence. Potter <sup>1</sup> gives the following list of people who have stuttered: Louis II of France, Michael II of the Empire of the East, and Louis XIII were very bad stutterers. Moses stuttered and probably Paul. Demosthenes either stuttered or lisped. The Rev. Canon Kingsley was a very bad stutterer. And among others may be named Voisin, Warren, Curran, Palmer, and many more. Charles Lamb should be added to the list.

Terman states that the number of stutterers "exceeds the combined number of deaf, blind,

<sup>1</sup> "Speech and Its Defects," 1882.

## UNHEALTHY TYPES OF SPEECH

and insane," and adds that "when we remember, further, that a large majority of speech defects could be readily and inexpensively cured, the usual apathy assumes almost the aspect of cruelty."

About seventy-two hundredths of one per cent. (.72) of the school population stutters,<sup>1</sup> and when there is added to this the relatively much higher percentage in the institutions for the mentally deficient and the epileptic, the number will in all probability equal one per cent. of the population.

The beginning of stuttering is usually gradual, but very often the broken unrhythmical speech of the very young child is never outgrown and the condition remains undiagnosed until some conspicuous occasion, such as the first day at school or a platform recitation, calls attention to it. It is rarely noticed in young children, although it is often present. The statement is therefore often made by the parents that the child began to stutter after

<sup>1</sup> "A Survey of Speech Defects," Smiley Blanton, M.D., "Journal of Educational Psychology," December, 1916.

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some accident or illness or on some special occasion, and while this may in many instances be true, it is very much more likely that the coordinational speech activities of the child have been abnormal from the beginning.

The attitude of parents is usually either one of complete apathy—that the child will outgrow his defects or that it is a bad habit, which can be corrected by sufficient nagging—or it is one of over-concentration, in which case the child is made to worry by the continual expressed and unexpressed fears of the parent.

Usually, if the child is taken to the general practitioner for diagnosis, he is told that the stuttering is merely a bad habit, and that he has only to grow up in order to cure it. How this impression can have persisted in the face of the presence of many adult stutterers will ever remain a mystery. Perhaps it is caused, to a certain extent, by the hopelessness which must face a conscientious parent in the face of any serious emotional defect, for, while stuttering is by no means unarrestable, it is the result of a functional disease of the nervous system,

## UNHEALTHY TYPES OF SPEECH

which requires constant consideration and, more than that, a reversal of the present attitude along the lines of hygiene and discipline.

The correct attitude for the parent to have is that he will do what he can both in treatment and in adjusting the child's life, physically and emotionally, to the environment, and, having done this, accept the defect with the best possible grace. Most stutterers cannot fail at least to adjust themselves somewhat to conditions. If the conditions themselves are made right, they can at least be made infinitely happier and be taught that while they may not necessarily be able to cure the stuttering, they can at least place a different value on it. The training for stutterers must be given serious consideration.

The child who has not yet acquired this symptom is the person who will show the greatest results from training, but as soon as the stuttering has begun, the training for both the general coördinations and the speech coördinations must be very carefully conducted.

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### PATENT METHODS

Copyrighted and secret methods are unethical. No person whose attitude in the matter is honorable would wish to preserve for his own financial gain the secret cure of such a serious and handicapping symptom. The reason for a "secret cure" is always that it cannot stand the white light of publicity. No one can guarantee a cure of stuttering and be certain of obtaining it, although the simplest thing will often apparently give temporary relief. These simple things may vary very greatly. Sometimes a movement of the hand in rhythm, sometimes nodding the head or twisting the voice or visualizing the word will bring about some marked change in the stutterer's mental attitude. But these measures bring only temporary relief from the symptom and do not touch the underlying cause.

Only recently a case came under our notice in which the child was told she must sleep with an open window, that it would perhaps help her stuttering. The teacher had reference, of

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course, to general hygiene. The child, however, took the statement literally, and, on returning to school three days later, said to the teacher, "You see, I am cured of my stuttering." And so, indeed, she did appear to be, but unless such a case were reëducated both emotionally and in the field of the coördinations, the chances of a relapse would be very great indeed. The more amenable to such a suggestion the patient might be, the more amenable to other detrimental types of suggestion and the less likelihood of a permanent cure.

It is at this stage and before the relapse that the patient is dismissed from the quack schools, often after signing a paper saying that he is cured. This paper effectually cuts him off from recourse to the courts and adds another testimonial to the long list.

Very often under the correct treatment the patient even becomes temporarily worse, as his attention is called to his defect by the training and his emotional life is stirred by the re-educational processes, but the aid which is given



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is built on a sure foundation and not on the shifting sands of the quack methods.

### FIELDS FOR AID

Some of the fields in which vital aid can be given to the stutterer in the home will be briefly outlined.

The child should never be submitted to conditions that are calculated to produce speech pressure and should never be put in a position where he cannot talk freely, if he desires to do so. This, of course, is difficult under our present school arrangements, and some modification in training is necessary to meet existing conditions. But he can at least be given every opportunity to express himself outside of school hours.

It is one of the greatest complaints of stutterers that other people, with misplaced sympathy, are perpetually taking their sentences out of their mouths. They answer the questions that they themselves ask, and guide the conversation in such a way that the stutterer will not be permitted to talk. Most stutterers like to

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talk, even if they do stutter, and they do not like to be deprived of this possibility of expression. A general education on the part of the public to control restlessness when the stutterer begins to speak, would be a very great kindness.

The child who stutters should not be permitted to become a victim of introspection. Perhaps this, more than any other tendency, develops in the stutterer. It is, in the first place, characteristic of him, and as his natural contact with the world is likely to be so unsatisfactory he replaces his interest in real life with an interest in an imaginary life laid in books and day-dreams.

He should be aided to adjust himself to life with other children. If his tendencies are not in this direction, a great deal of attention should be paid by the parent to this point. Other children should be invited to share his work, as well as his play, and these should be children selected with a sympathetic view to his needs.

The question comes up of the likelihood of other children acquiring the stuttering from

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him. While this has apparently happened occasionally, the number of cases is so small as to make the chances almost negligible. It is quite sure that the stuttering will not be acquired from imitation unless there already exists some marked neuropathic taint or a retarded mental condition.

The stutterer should be carefully guided with regard to possible slight attacks of excitement and depression. He should not be encouraged to be too boisterous and gay in temperament, if he seems to suffer afterwards a corresponding amount of depression. This form of emotional reaction is not always easy to diagnose in either a child or an adult unless it becomes quite marked, but after-effects will often determine whether the laughter and vivacity is normal or abnormal, or rather, healthy or unhealthy.

The stutterer must be zealously guarded from nagging, whether by the parent or the nurse or the teachers or by other children. If his general coördinations are faulty, which

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they uniformly are, if he slams doors and breaks china, as much latitude must be allowed him as possible, and he should be given more opportunity for developing his muscles in an atmosphere in which these accidents are not likely to occur. Nagging in these cases has never been known to benefit a child and certainly may do a great amount of harm.

The stutterer who is left-handed has a handicap of a very serious nature if the use of this preferential hand is interfered with in any way. The already faulty coördinational centers should not have the additional burden of an entire reëducation in the highly specialized fields of writing and other accessory muscles. Ballard<sup>1</sup> gives the statistics from a very elaborate survey made by him on the school children of London, and his findings eliminate any question as to the effect of the change of the preferential side on speech. Since the arrangement of door-knobs, faucets, handles, etc., is made for

<sup>1</sup> Ballard, P. B., "Sinistrality and Speech," *Journal of Experimental Pedagogy*, 1912.

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the right-handed person, special exercise for the left-handed should be devised to offset their effect on him.

It is obvious that the rhythm of the stutterer's speech is almost lacking. Exercises, therefore, that tend to develop the general rhythm are of value. First among these would be swimming and dancing, both of which have an excellent effect on the development of rhythmical breathing and control of the diaphragm, and would thus tend to correct the abdominal and diaphragmatic cramps that are present in stuttering.

The singing of simple, very rhythmical tunes is also advised. This faculty should not be cultivated for use in front of an audience since, while there are instances in which stutterers are very excellent singers, it will usually be found on closer observation that the stutterer has neither the coördinational control nor the temperament for a successful musical career.

Indeed, the entire coördinational possibilities of the stutterer are below par. Individual cases may be excellent shots, they may dance

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well, they may run intricate machines, or do fine crafts work, but to the large majority such occupations are not those in which they are most likely to succeed, nor which are most likely to be of benefit.

## VOCATIONAL GUIDANCE

The stutterer should be encouraged to limit himself to those fields of endeavor in which the life is as simple and the possibilities for quiet happiness are as great as can be found. This is not his temperament. He is more likely to wish to select some highly ambitious field of endeavor, and the fields of law and preaching and medicine all have in them some members who stutter and who have succeeded, but the effort required is so great that none of these fields are to be advised for the person who has this emotional and coördinational defect.

## HYGIENE

The usual hygiene as regards food, bath, and sleeping should be most vigorously pursued. Ten hours' sleep a night and two hours a day

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is not too much for a child who has any coordinational trouble. If the sleeping habits have become bad, they should be persistently corrected. Needless to say, no coffee or tea or alcoholic drinks should be tolerated.

The conditions under which he sleeps are very vital. *No exception should ever be made to the rule that the stutterer must sleep alone,* and never in the room with the opposite sex. No sacrifice is too great in order that this may be carried out.

Above all, the stutterer must be treated with the greatest consideration and diplomacy. The teacher of the stutterer has in her power his entire emotional life and happiness. By correcting and laughing at him for his disorder or by permitting other children to do so she may rob him of many of the possibilities for happiness that life holds. Perhaps the direction of a stutterer in the class will require more diplomacy, more patience, than a teacher feels she should be asked to give. But to help lift the stutterer out of the despair into which he is likely to fall is an objective that makes the

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strain and added worry and care seem very unimportant indeed.

### CONDITIONS RELATED TO STUTTERING

All of us stutter at certain times. Some, affected by the presence of a large audience, will not only stutter severely, but even lose their power for speech entirely. Some, when trying to talk under conditions where very careful language must be used or where thoughts do not come easily, will find themselves stuttering. Any of these conditions, taken beyond the normal line, becomes pathological, and we refer to them as stuttering, just as in insanity we say that there is no severe line between the sane and the insane, so we must say that there is no severe line between the stutterer and the non-stutterer.

There are other vocal and speech defects, which seem to be related to stuttering. This group comprises one form of lisping, which is a retention of an infantile type of speech; the monotonous voice, which is an inhibition in the field of inflection in the same way in which stut-



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tering is in the field of general speech coördination; and harsh, hoarse, weak, whiny, and high-pitched voices, which, while they do not show so clear-cut a relation, and are very much more amenable to treatment, are often due to a lack of nervous control, although they may sometimes be due to glandular disorders or inflammatory processes.

All of these conditions may some time be observed in the speech of stutterers, the monotonous speech, or its opposite, being an almost constant accompaniment of stuttering.

### THE MONOTONOUS VOICE

The monotonous voice must be considered in both the field of speech and singing, as the use of the voice in both comes under the same emotional laws.

By monotonous voice is meant the voice that does not have approximately the same inflections that the normal voice has, and not merely the very unusual voice that speaks or sings entirely on one tone. E. W. Scripture has shown the difference in inflection between the voice of

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the stutterer and the normal speech. This is very marked, very well defined. And it will be found that in the monotonous voice the speech often approaches that of the stutterer in its lack of inflection.

This defect is unfortunately rarely considered, and especially is this true of the monotonous voice in singing, where the voice is usually regarded by the teachers for its esthetic and artistic value rather than as an indicator of mental health. In the majority of cases the child with this defect is corrected and made to sing in public, and attempts are made to reform it in the presence of the class and others not similarly affected. There are possibilities, in such treatment, of bringing on not only the defect of stuttering, but also the severe psychoses that have their root in a feeling of inferiority.

Like the stutterer, the child with the monotonous voice may be worked with alone or in small groups, and this, indeed, when undertaken by a sympathetic teacher is very excellent.

It is a fundamental of correct emotional

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pedagogy, if it may be so called, that the child with either monotonous or stuttering speech, indeed with defective speech of any sort, should never have his deficiency pointed out in the presence of any one but those similarly affected.

The monotonous voice is also, according to the best authorities, sometimes symptomatic of the illness of epilepsy. It is pointed out by Dr. L. Pierce Clark that the voice of the epileptic has a very definite monotonous quality (Clark's sign), due perhaps to the lack of emotional flexibility. The voice of the stutterer has this same quality, due perhaps to the inhibition of his emotions rather than to a lack but both epilepsy and stuttering are often present in the same individual.

The training for flexibility should be given in both cases with a view to modifying the underlying condition.

## LETTER SUBSTITUTION

Under letter substitution will be both lipping and lalling. Recently these two forms of de-

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fects of speech have been put together under the general term of lisping, although in the past most writers have referred to them separately. The old use of the word lisping indicates those "s" and "z" and "th" sounds that are incorrectly made and the substitutions for them. Lalling refers to the confusion of the letters "l" and "r." An occasional incorrect use of the word lisping is as affected and simpering as the affected speech of a certain class of English people. This last use of the word is unfortunate and is gradually being dropped. The word lisping will be used here to include all these forms of letter substitution. Lisping may be subdivided under a number of heads.

*The first type, neurotic lisping, so called by E. W. Scripture, is allied to stuttering. It is a defect of the emotional adaptation and the coordinations. It is perhaps the type least amenable to treatment; like the stutterer, the patient needs an entire reorganization of the emotional life and the same delicacy of handling.*

*The second, mechanical lisping, is present when the teeth or jaws or dental arch are mal-*

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formed in such a way that the letters cannot be made correctly.

*The third* form comes from negligence and comprises the class most readily amenable to treatment, as a little attention to the misuse of the articulating organs is usually sufficient to correct it.

A combination of these two types, which might be called negligent-mechanical, is very prevalent among the mentally deficient. The foundation of the defect will be some tangible physical difficulty, such as high dental arch, protracting or retracting lower jaw, etc., but the lack of compensation for these defects will be the negligence that is, in turn, due to lack of mentality.

The person with full intelligence, not handicapped by an emotional disorder, who has an over-high dental arch, soon learns to compensate his movements to his condition. Even persons with partial intelligence will learn to do so to a certain extent, but among the imbeciles and low grade morons the intelligence to make the necessary adjustment is lacking.

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Training for this class is, of course, of doubtful value, as the time required to accomplish results is not justified.

A second combination may be called neurotic-mechanical. In this condition the mechanical basis for a letter substitution is present, as is also the requisite intelligence to correct it, but the lisp has been given an emotional value to the patient in the same way in which the purely neurotic lisp has and is retained for the same reason. This is, perhaps, the most common form of lisp.

*The fourth* form may be classed as oral inactivity, and may be back oral inactivity or front oral inactivity or a combination of both. This group of defects is most often placed with lisp and lalling, but is deserving of more special study and consideration. While it may be present in persons of full or nearly full intelligence, due perhaps to some illness in the second stage of speech acquisitions, or to neurotic tendency or to certain forms of paralysis, it is the prevailing defect of the low grade moron and the imbecile. Even leaving out of

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consideration the very low grade cases, in which if there is any speech at all this disorder is virtually constant, it will be seen to outrank the amount of lisping and lalling.

In a preliminary survey of eighty cases (New York Children's Hospitals and Schools, Randall's Island, New York City) we found fifty-three cases of malformation of the oral cavity. Among the high grade cases were sixteen cases of malformation, six cases of letter substitution, and three cases of oral inactivity. Among the medium cases there were thirty-seven malformations, ten letter substitutions, and eleven cases of oral inactivity, and one total lack of speech. No extremely low grade or idiot cases were included.

The most common type of this disorder is a lack of the activity of the back part of the tongue and of the throat, and an inactivity in the formation of the final front consonant sounds. Often the front consonant sounds can be made separately and will be made on an initial consonant, but not on a final. As, for instance, the letter "l" in the word "lisle," the

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tip of the tongue will be placed against the roof in the first "l," but in the second will merely be thickened slightly and permitted to remain relatively inactive, giving the word "liah." In higher grade subjects training is often justified where front oral inactivity predominates, and where back oral inactivity is present the prognosis is not so good.

*The fifth* form will be grouped as foreign accent. This may be due to one of two causes; that the child is born of foreign parentage and does not hear the English language until the letter formation and general speech is already acquired, or that the parents, realizing that the best time to acquire a language is during the early years of childhood, give it some foreign language in preference to its own. This affects two parts of the population, those of German extraction, who have to a great extent given their children German in the earlier years, even when they themselves spoke English, and the very well-to-do, who have persistently given their children French during the earlier years. Both of these groups of people



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are very deliberately laying aside the best chances of the child to acquire English. The people having their children taught German perhaps do the most harm, as the construction of the German language differs so greatly from our own, and is, therefore, much harder for the child to translate into English when his school duties must be taken up. Many cases of very bad stuttering have come under our observation, where this early training of German or French had occurred. Attention has been called to this by many writers on the subject.

In dealing with these defects of foreign accent, they may be grouped with American dialects. The teacher should carefully analyze those letters that are mismade by the pupil and, through constant repetition and the use of sight reading of the lips, teach the child the correct position.

### INDISTINCT SPEECH

A defect related to these two is idioglossia, individual language, which is a distinct lan-

## UNHEALTHY TYPES OF SPEECH

guage usually made up by the child, assisted by the parents. These cases often have their origin in the blind affection of the mother who uses baby talk to a child until it becomes entirely distorted, and who does not require from the child the correct use of the mother tongue.

"Indistinct speech," of course, may have many causes. It may be a mild form of idiosyncrasy or it may relate to cleft palate or to a poor use of the soft palate. It may be a back or front oral inactivity; it may be lisping; it may be lack of inflection and emphasis; or it may be a combination of these defects. Indistinct speech that will not be corrected by attention and training should suggest the necessity for a thorough mental examination, as the majority of people not markedly neurotic who do not acquire the ability to make themselves understood are definitely lacking in mental development.

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### LACK OF SPEECH <sup>1</sup>

A total lack of speech may be due to a number of causes, first among them, of course, being that of mental deficiency. The lowest-grade idiot has no speech, and those just a bit higher will have but a few words, which will apply in some way to their physical wants. Occasionally they will have the words indicating some member of the family, such as the "mother" or "nurse."

The second cause may be an injury to the brain, such as a hemorrhage from pressure at birth. This usually shows itself in paralysis of some form.

Third, the disturbance known as mutism. Usually, however, the child learns to talk and then ceases. Very often the child will talk to some member of his own family and not to others. The number of children who have complete mutism is very small, and it is usually combined with a gross retardation.

<sup>1</sup>Lack of speech from total deafness is, of course, not discussed here.

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There is another class in which slowness of speech may be due to serious illnesses in infancy. A large number of children who suffer from digestive disorders incident to the first taking of food other than mother's milk are often in this class. The speech activities probably being blocked and lost during the illness, they must be acquired again at a later and less suitable age.

By far the greater number of children who lack speech at two, two and a half, and three, are the victims of rearing.

Speech will not be acquired until there is a necessity for it. If the child is reared in a home where its slightest whim is anticipated, where it has only to point to the thing that it wishes, or scream until each possible thing in turn is presented and the desired object attained, it will have no need for speech, and speech is then not likely to develop without contact with the outside world, where its signs are not understood or obeyed, or until the enriching of the emotional life gives the necessity for the need of a medium of communication.

## SPEECH TRAINING FOR CHILDREN

Where full intelligence is present the remedy is simple. The child should be required to make an attempt at repeating the names of things before they are given to him. Even such vital things as food and water may have to be withheld until necessity forces the child to concede to these new demands and repeat or attempt to repeat the word that the giver says.

A case in point is a three-year-old boy recently presented for diagnosis on account of complete lack of speech. This was an only child in the home with the parents and grandparents on both sides. As though this did not constitute sufficient guidance for one child, a *bonné* was also in attendance to anticipate the slightest whim. Three weeks devoted to the education of the child *after the education of the adults had been accomplished* sufficed to arouse the latent speech faculty.

A second very handicapping fault in the rearing is too great an anxiety on the part of the parent to preserve the child from possible falls and blows. This results in the child not being permitted to crawl and walk freely, and as a

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result, the fundamental coördination of the muscles does not develop. Allied to this is the handicap of being reared in a house of slick floors and being made to wear stiff-soled shoes, under which conditions the acquiring of walking and running is delayed, with a subsequent delay of the development of speech.

Unfortunately these handicaps are oftenest imposed upon the child of greatest promise, the child whose circumstances would seem to guarantee excellent opportunities rather than the child whose heredity and poverty mark him as a poor social asset. This is the speech handicap of the upper classes, and is seen in ever increasing numbers as the gospel of waxed floors and immaculate and pampered and only children is spread through the great body of society.

Naturally speech acquired at a later period is speech acquired at a less auspicious period, and the result is a weakened speech mechanism. The result of this may be a lisp, an inactivity of the oral mechanism, or, more unfortunate than all, a stutter.

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The problem of heredity also enters into this lack of speech, as occasionally children are seen who are members of families in which all, or nearly all, have acquired speech at a very late date, but a child who does not acquire speech by the age of three years should be taken to a neuro-psychiatrist who is qualified to give both a physical and mental examination.

## CHAPTER VIII

### RELATED PROBLEMS

**N**EUROTIC and retarded children are a problem of vital concern to the teacher of speech; the neurotic child because the majority of the serious and handicapping speech defects are superimposed on the neurotic temperament and are the outgrowth of it, and the retarded because speech does not develop correctly where intelligence is lacking. Speech, in fact, is a thermometer of both of these conditions, certain types of defective speech indicating lack of adjustment in the emotional field and certain types indicating retardations in the mental field.

"A nervous child" means to the large part of the public "a thin child who jumps at noises, does not sleep well, and is finicky about its food." All of these attributes are those of cer-



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tain nervous children, but it is well to remember that they in no wise complete the list.

While it is quite possible that there are many factors in the make-up of the neurotic child such as the factor of hereditary or acquired constitutions of an inferior grade, these are not the aspects of the problem with which the teacher, with her limited time for general study, has to deal. In an ideal state she would be equipped with a complete knowledge of the entire psychic mechanism, but she must often content herself with a study of the child as he appears, his poise, movements, attitude, and reaction to the school-room conditions.

A brief study of some of these different types as they confront the teacher of speech can in no way be considered an additional problem. It is rather a key with which to read hitherto inexplicable conduct, of which a thorough study offers a solution and justifies a different attitude toward the person now considered an offender against social laws, but who is in reality a sufferer from a disease.

## RELATED PROBLEMS

### THE EGO-CENTRIC

The ego-centric is difficult to describe from the point of view of the behaviorist, because he manifests himself in so many ways, often opposites, and varies in his symptoms with great rapidity.

His fundamental trait is his extreme over-estimation of his own individual value. He is seen most in the early grades as an example of "the spoiled child."

He is intensely personal in the application of all criticism to himself. Blame depresses him, praise over-stimulates. His pencil, not himself, is to blame for his poor writing; the bad light, for his poor number work; the weather, for his lack of promptness; his teacher, for his poor grades, and, most pernicious of all, his health, for everything that he cannot explain in any other way. Often his health becomes the chief excuse until it is necessary for him to "enjoy bad health" most of the time. Thus is the foundation laid for hypochondriacism.

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His attitude toward his tasks is often that all are unworthy of him, either too hard or too easy. He is hypersensitive to noise, to light, to heat, to cold, to food. His nervous safety margin becomes so narrow that the slightest extra strain, which a normal person endures with only discomfort, becomes a burden too great to be borne. And he is subject to outbursts of irritability.

He has in an exaggerated degree what White<sup>1</sup> calls "the instinct for the familiar—the safety motive," and changes of routine become intensely disagreeable to him. He may be excessively orderly, demanding the same hardness of all pencils, the same arrangement of his clothing, the same light on his desk, or he may be utterly disorderly, conceiving himself a creature worthy the work and worry of all with whom he comes in contact.

Often these children have, despite their intolerable conceit, curiously attractive personalities.

<sup>1</sup> White, William A., "Principles of Mental Hygiene."

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Their own home influence is often the poorest they could have for combating such trouble, for behind each neurotic child of this type there is usually one and sometimes more than one neurotic adult, the association with whom adds to, rather than counteracts, the mental disorganization under which they are laboring.

### THE NEGATIVE SUGGESTIBLE

A type fortunately relatively rare, but familiar to every teacher, is the negative suggestible. This child is as definitely suggestible as the most deficient child mentally, but he accepts suggestions in the opposite to which they are given. For instance, if the class is asked to rise, he remains seated, if asked to sit down, he likes to stand. He may have a full measure of mental development or he may be definitely deficient.

This trait is often encouraged in young children, and as most children respond to suggestion given in the opposite, a display of it is often considered clever by unthinking adults. The

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child who refuses to respond to "Give mother a kiss," will often be told: "All right, mother would n't kiss you now. She does n't want a kiss." The resulting triumph is interesting to the parent, but exceedingly bad for the child, as it sets this type of reaction. Later, when it ceases to be "cute," the trait so carefully fostered is considered stubbornness and punished as such.

Such a case is not one for discipline. The birch or the knout or bread and water might bring the offender to terms, but will not reduce the difficulty under which he is laboring.

It most often has its foundation in the feeling of inferiority; the victim compensates for it by attempting to be different in every respect since he cannot be superior.

As an adult he becomes the ego-centric, the individualist run wild, and either a violent reactionary or a violent radical.

This fault yields most easily to quiet talk and to general mental hygiene. If it persists, a thorough mental examination and afterwards a change of surroundings is suggested.

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### SPEECH PRESSURE

Speech pressure, or excessive need for speech, is present at times in all normal people. Especially does this show itself when embarrassment or some unusual emotion lowers the guard of reserve that has been built around us by training. Children have not yet built this wall, and the incessant talker is, therefore, most evident during the earlier years than later.

Every teacher is familiar with this type. No subject is mentioned upon which this child cannot and will not express itself. No time is too inopportune, no occasion too inappropriate. Often the bearing of the child indicates a realization of the unwiseness of the action, but, as though in spite of his better judgment, no visitor enters the room that this child does not hold up his hand, and no free-play period arrives at which he is not found talking.

Few rooms of as many as twenty-five have not one of these children, and many have more. It would be safe to assume that they comprise

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at least five per cent. of the school population. The distraction from work, the time taken by their chatter, the interruptions to their own and the others' habits of concentration, and the irritation their habit affords to both teacher and child, makes of them a problem for the serious consideration of the educator.

Often exorbitant timidity and a deep feeling of inadequacy lies at the root of their trouble, for timidity does not always manifest itself in confusion and blushes. The timid are the most vulnerable of people. Boldness is a protective coloring that they assume in order to meet the world at all comfortably, and the timid child, either consciously or unconsciously, often over-compensates until the picture which he presents is one of brazenness. Often such cases will reveal on close study slight periods of depression, which are felt as a relief to the teacher, but which, in reality, border on the pathological.

For these children shorter sessions, with more equalized holidays or a complete reorganization of the school work, must eventually be

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arranged. This is indicated by the fact that after vacations spent in the country or under good conditions in which ample rest and quiet amusement have been provided, they are much improved, while they grow worse again as the period of strain and repressed motor output lengthens with the advance of the school year.

Until a different arrangement can be made the teacher can materially improve conditions not only by affording the child many little periods of relief, but also by her attitude.

The child should never be corrected for this fault in the presence of others, but taken aside and spoken to in the most evident spirit of kindness. Even with the best intentions such a correction will still hold for him exceeding suffering and quite possibly no benefit.

Some other form of motor activity must be substituted for speech. Occasionally it will be found wise to appoint for him little talking periods after school. During the school period he should jot down anything which he may wish to mention, and by so doing utilize some



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of the pent-up motor activities and thus bridge the moment.

He may be asked to do some small task when the talking has evidently become imperative, such a task as opening the window or cleaning the board, and if he is responsive to the teacher a little signal may be agreed upon to use when he feels that he must talk or when the teacher feels that he talked enough. Aside from the actual aid thus afforded, the tie of sympathy may be made a matter of very vital aid.

If these cases do not respond to such treatment a thorough mental examination should be given, not only to determine the amount of mental development, but also any peculiarities or lack of adaptation in the emotional field. Maladjusted or, as we say, "insane" children do exist, and sometimes go undiagnosed from one school-room to another, much to the disgrace of our school system.

Many of these "talkers" are of exceptionally good mentality, but are either laboring under a physical handicap, which keeps their nervous vitality below par, or are in grades

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below their mental ability and are thus bored by the school work. A child thus handicapped is likely to develop many bad mental habits, lack of concentration, over-talkativeness, over-imaginativeness, and many others, which may result from the unused mind and quiet body. The remedy for this lies, of course, in grading according to the mental rather than the chronological age and thus stimulating a vital interest in the school work.

It is not, however, unusual to find them among the retarded mentally. Every ungraded room is likely to show three or four who are only still when browbeaten into being still or when given other motor expression. And there are children still in the grades, of the "facetious" type, children of markedly retarded mentality who, on account of their activity, have not come under the suspicion of the examiners.

## MALADJUSTED ("INSANE")

The training of the "insane" child is obviously not a problem for the public school in its

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present organization, but the ability to make a tentative diagnosis of this trouble is invaluable.

It must be remembered that the absolutely normal person, mental and physical, is a person of the idealist's vision. Mental as well as physical variations are necessary for the biological safety of the race. It is when these traits, these variations in behavior and reactions, obtrude themselves in such a way as to tend to make their possessors social obstructions that they must be dealt with. When they entirely incapacitate the person and make him unfit for social intercourse, we class that person as definitely maladjusted. It is this latter class that have been roughly and inadequately called insane.

The stretch between the normal and the abnormal, the difference between the sane and the insane, is often the difference of background, just as white is seen against black and not against a background of its own color. Many traits, normal under certain conditions, become the failing of the neurotic and, in the last degree, the illness of the maladjusted. A

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study of the mental mechanisms underlying insanity and the mental hygiene that might be used for its avoidance has now become of vital interest from the point of view of both social welfare and school efficiency.

Most of the people now receiving care in institutions for the malady were, as Dr. Terman has so aptly pointed out, only a few short years ago in the public schools, and were there at an age when the correct education of many was possible.

This subject is, of course, much too complicated to be entered into at length in this study, but there are many books obtainable which are so simply written as to be suited to the use of the uninitiated.<sup>1</sup>

### TICS

All tics and habit spasms have an unfortunate effect on speech, as the motor activities tend to become less rhythmical and induce a condition of nervous exhaustion. Certain tics,

<sup>1</sup> "Mechanisms of Character Formation," by William A. White (published by the Macmillan Co.), is recommended.

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because they interfere directly with the free use of the vocal and speech mechanisms, must be specially considered by the speech worker.

Chief among these are tics of the diaphragm, as they interfere with the use of correct breathing control. This tic, present, of course, in stuttering, and tics of the arms and chest interfere with respiration. Tics of the face, throat, and jaw, tics of the nose, "sniffing," interfere directly with the organs of articulation.

It should be unnecessary to say that only thoughtlessness or extreme cruelty can justify the suppression of these tics by punishment. An involuntary movement is not under conscious control.

Many of these tics have their foundation in some slight physical disability, which should be removed. Some, unfortunately, have their foundation in psychic disability, the removal of which is a longer and more difficult process. All, whether of physical or psychic origin, have a definite psychic value. The organism does not continue useless movements. They may be apparently useless, even seem so to the person

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who has acquired them, but that they are emblems of some need or serve some purpose in the emotional life of that person cannot be doubted.

Often this motive is anti-social in a broad sense or a primitive thing which the possessor must slough off, but it cannot be sloughed off for him by others. And it is for that reason that the only kind attitude is helpfulness in a negative way. Nagging mothers and families, nagging teachers, are only too often the cause of the deep rooting of habit tics, which otherwise would have had their brief day and passed.

Dr. L. Pierce Clark, in a lecture delivered December, 1917, at Randall's Island Children's Hospitals and School, New York City, says that for the correction of habit tics, such as nodding the head, winking the eye, sniffing, etc., after the need for these reflex actions is passed, "rhythmic drill of a military character, but not too severe and exacting, and especially if it can be had with music," is of great value. It must be remembered that the child on whom such a habit fastens is a legitimate

## SPEECH TRAINING FOR CHILDREN

subject for special consideration but not necessarily for special petting and indulgence.

### THE EPILEPSIES

Epilepsy, a term including a large amount of indifferntiated material, is a condition with which the teacher has more frequently to deal than she realizes. It is difficult to diagnose and may be present or nascent in a great many cases where no fits are present. It sometimes shows itself in what are called "psychic equivalents," that is, outbursts of temper, extreme irritability, or nervousness. The characteristic temperament has an extreme lack of emotional richness. Exalted ideas of the importance of the patient's own individuality are common.

Perhaps incipient cases come under the heading of educable psychosis. Certainly all who have intelligence sufficient to make it possible should have a psychic reëducation. Definite training for expression and for melody may help some cases and may also modify that disagreeable symptom, the monotonous voice. It

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may also add color and richness of emotional feeling to a temperament especially lacking in these qualities.

### THE LAZY

One of the most useful symptoms by which a child may be judged, and one which is to a great extent ignored, is that of laziness. The lazy child is in a great majority of cases either the sick child, the neurotic child, the maladjusted, or, more frequently, the retarded child. Laziness indicates lack of interest, and the teacher who finds too large a percentage of lazy children in her room should look within herself.

Occasionally a child will be found who is not ill or neurotic or maladjusted or retarded, but for whom the work is very much too easy. Very often, however, the large fellow on the back seat, considered lazy and good-for-nothing by the entire class, is retarded and belongs in a special room where manual and other arts suitable to his intelligence can be given him until the age is reached when he can be put at



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some occupation in which he is happy and useful outside of the school.

### MENTALLY DEFICIENT

Mental deficiency, as such, cannot be considered in a brief space, but it must not be forgotten that to say a child is retarded is to say only a small part. Mental deficient have their types, their temperaments, their emotional disorders, to as great a degree as the normal, for they are less fitted to cope with the new emergencies with which they are faced. They must, therefore, be considered not only in the light of their lack of intelligence, but also with a view to their neurotic symptoms, and must be aided to the best adjustment possible. They suffer, many of them, with very disturbing inadequacy of feelings. They "go insane" as to the normal. They stutter and lisp and have their own emotional perplexities and sadnesses.

Too often the diagnosis "feeble-minded" is the signal for treating a child as though it were unconscious, teachers often commenting on its retardation in its hearing. Unless the child is

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an idiot, in which case he very rarely reaches the public schools, he is likely to associate these special references to himself with ideas of reproach.

These people, above all others, must have the way made smooth. The greatest kindness, the tenderest care, must be meted to them, and while this is often far from easy and takes away from the time which can be given to the normal child, it is absolutely essential as long as children thus handicapped are permitted to remain in the grades.

It is, of course, very unfortunate that they are not more generally trained in the years when the processes of development are still more or less active. At present the public unfortunately takes the attitude that they "must be given the benefit of the doubt" and put in the first few grades of the public school until their insufficiencies show themselves in a conspicuous manner. When they are finally given training of the sort for which they are best fitted most of their best years for learning are past. It will surely not be many years be-

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fore the retarded, diagnosed in the first years of life, will be truly given the benefit of the doubt and then permitted, as their intelligence develops, to enjoy the educational blessings suited to their abilities in the years when they are still developing.

Speech defects are very common among the retarded, the same emotional upsets and mental adaptations occurring only in a more marked degree among them as among the normally endowed, and the training given should be fitted to their intelligence.

In connection with this the problem presents itself as to how much time the highly trained speech teacher is justified in spending on these unfortunates. This must be decided on the merits of each individual case and of the learning ability and temperament of the child. While with the present scarcity of trained teachers in the speech field it would hardly be wise that the abnormal should be cared for and the normal child not, still, the speech defect may be the one added handicap that makes of the high-grade deficient a pauper or a criminal.

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In grading the intelligence of those children who have defects of speech no test depending on the use of speech is trustworthy. Fortunately, tests have been adapted to use with the deaf which can be used for those with defects of speech as well.<sup>1</sup>

## THE PHYSICALLY HANDICAPPED

The physical condition of neurotic children must be carefully considered. Handicapping emotional reactions sometimes depend for their persistence on handicapping physical conditions, but, while it may often be demonstrated that many physical disorders are the result rather than the cause of the mental condition, such a fact in no way indicates that the physical condition should not be relieved by direct methods.

School physicians have only limited time as a usual thing, and this must be spent with the obviously and acutely ill and in dealing with general measures of hygiene.

<sup>1</sup> Pintner and Patterson, "A Scale of Performance Tests."

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The problem of the child who drags through school, especially the spring part of the term, with headaches, digestive disturbances, eye disorders, crooked septums, or severe and numerous colds, requires a leisure that is unfortunately rarely accorded the medical man. The teacher must become somewhat expert in diagnosing these conditions and in a knowledge of what lies behind them.

The child who is already working under the handicap of a temperamental disability must have the way made as easy as possible in every other respect. Disorders of the eyes should be corrected whenever possible and the seating with regard to light and distance is imperative.

*Seating* in the school-rooms is done in different systems from many different considerations. Seating according to grade has the advantage of placing the brightest children in one group, the exceptionally bright in one group, and the dull in one group. But it is far from ideal in that it considers the ease of the teacher rather than the children. A near-sighted or a deaf child or one who has a defect of hearing

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that may be said to parallel near-sightedness should never be seated at the rear of the room.

Seating according to size lacks the value of the first method. Uniformity of looks in the school-room and the ability of the teacher to keep an eye on the small child who might otherwise be placed behind the large one are the sole considerations. The large child, who most often sits on the back seat, may be retarded, in which case every device is required to hold his attention, and if his sight or hearing is poor, which in a large percentage of cases is the fact, he should be protected from strain as thoroughly as a small child.

Beauty in the school-room should be sought not in even rows and straight lines, but in the harmonious adjustment of each child to his surroundings. Children are not decorative automaton. A school that so considers them is fostering neurotic tendencies and not meeting them as a square issue.

Poise is also an excellent indication of the vigor of the child. Enteroptosis is very prevalent among neurotic children. The abdomen

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of the child has correctly a slight outward curve. Any accentuation of this curve, together with drooping shoulders and head held too far forward, is indicative of ill health rather than of merely an unbeautiful condition. For correct use of the diaphragm, therefore, and of a mobile and controlled voice, it is essential that the walls of the diaphragm be in a position insuring the support of the abdominal contents.

Poor poise among the retarded is common. Mrs. Florence H. Kirk <sup>1</sup> says, "The beneficial effect of rhythmical movement in the case of mentally deficient children is already recognized." Rhythmic dancing has become a part of the training in all progressive institutions for the mentally deficient. The response of these children to music and movement in the folk dances and games is really very gratifying.

<sup>1</sup> Mrs. Florence H. Kirk, "Rhythmic Games and Dances for Children."

## CHAPTER IX

### EXTRA-SCHOOL ACTIVITIES

**M**ANY of the activities of the child that do not at first appear to come under the direction of the school are, in fact, so closely allied that they cannot be ignored. Correctly, the activities of the home and school are correlated, but under existing conditions the schools must take the outside work into consideration in the treatment of the child during the school hours.

The child's daily school routine will be of benefit to him or not accordingly as he is given similar or dissimilar work on the outside. Three hours of violin practice or three hours of gymnastic work will have very different influences on the effectiveness of the school routine.



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### SOCIAL DUTIES

Unfortunately, the associates and outside activities of the neurotic child cannot be observed and remedied by the teacher, and all the consideration and helpfulness on her part may be more than overcome by the attitude of playmates or of adults who have the home care of the child in hand.

Inside the school the teacher's opportunities are great. It is quite within the prerogative of the teacher to prevent the children from forming attachments of a destructive nature or to break up those already formed. Sometimes the removal from one room to another will give the opportunity for forming new associations. Not only is it well to move the child who is the leader of a clique, often the secret torture society of the school, but the victim of such a group may also be placed in a position where the possibilities for the formation of new friendships gives a weapon with which to fight. It often becomes as necessary to change the associates of the pet and darling of the school and put her

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into a healthier atmosphere in which there is less adulation as it is to remove the child who is an apparent social outcast.

While the "group" age is not reached until somewhat later than the first three grades, the cultivation of such activities and of competitive games is excellent in this respect. The child who, through timidity or some sort of unfortunate social handicap, has been left more or less on the edge of things, has thus an opportunity to compete on open ground. This is often demonstrated in the higher grades with the introduction of athletics, but the usefulness of it may be observed in the lower grades as well.

Social activities should be very carefully regulated, especially for such as have a tendency toward nervous troubles. The unfortunate custom, which is becoming more and more prevalent, of aping in the social life of the child the social life of the parent should be frowned upon. Teas, elaborate luncheons, matinées, and dinner dances, with after-dinner theater parties are beyond the powers of adaptation of

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the ordinary child, although they are not unheard of.

The child, as well as the adult, cannot enjoy competitive social life unless he is a success, and personal success under such conditions is a strain on the adaptive capacities of even the more highly developed adult. Simple parties, selected moving pictures or plays, a luncheon at home or in a quiet restaurant, should be the most that a child under fifteen is permitted.

### PLATFORM READING

Injudicious encouragement given by the child's family in the field of reading and oral recitation should be watched closely by the teacher interested in the nervous development of the child. Two cases have come under our observation in which stuttering began during oral recitation of the usual rhymes of the nursery.

Up to the age of ten years a child is not emotionally capable of adapting himself to public platform work no matter how willing he may be or how retentive his memory. Often, the

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very love of such reciting indicates the highly neurotic taint and the harm that indulging this desire may do. •

Especially at this age there should be no over-estimating of the personal value. There can be none without harm. The child must be protected from this natural tendency to over-value as well as to undervalue himself. Constant success on stage or platform or before the members of his own family is likely to cultivate these very exaggerations of his own importance. 2

Some public reputation in these fields puts him in a very unfair position—in the highly competitive class of the “child prodigy.” To have the child in such an atmosphere, no matter how much it may please the vanity of his parents, is grossly unfair and is rarely productive of the genius often expected.

## FICTION

From the point of view of the mental hygienist, excessive reading of fiction and romantic history is not a thing to be encouraged. A

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high-strung child, with nervous tendencies, is already too prone to let day-dreams take the place of action. In describing an extremely common type of insanity known as dementia praecox, Dr. Adolf Meyer says, "The patient has a disposition likely to make glorifications of vague abstractions." "There is a discrepancy between thought and action," says Terman. Fantastic day-dreaming is an accompaniment of unhealthy conditions, and fantastic day-dreaming is encouraged by too much reading. With a child, as with an adult, the reading of romances is a form of day-dreaming, and, while the latter usually realizes the dangers of this form of indulgence and knows how much he may safely undertake, such an important decision concerning the security of the mental health should not be left in the hands of the young child.

## HOME STUDY

The addition of home study to the already over-full school day of the child has been so much discussed during the last few years that

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a further detailed discussion is not necessary. Where the custom is still retained of assigning home work, an exception should be made of the child with eye-strain, and with malnutrition, and of the neurotic or stuttering child, who should never be permitted to add to school hours. These children are likely to be over-ambitious and are often keenly competitive and should be controlled if necessary by not giving credit to them for any work done in other than school hours.

### PIANO PRACTICE

Piano practice should not be given to a child of a highly nervous temperament; when this is done, the schools must regulate their activities accordingly. Children of this type who wish an education in music should be given it during the vacation period or not at all. Musicianship is highly bought at the price of health.

### ARTS AND CRAFTS AND SINISTRALITY

The left-handed child should be especially considered in the arts and crafts. It is now cus-

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tomary for piano and violin teachers to attempt to conform the child to the music, rather than the music to the child. As has been pointed out in the chapter on coördinations, the left-handed person cannot be adapted to his surroundings without definite harm. It is obvious that rapid scales, trills, and complicated time for the treble, while they may be suited to a right-handed person, should not be given to a left-handed person. For this person the rapid coördinations should be put in the bass.

The violin teacher has a greater problem than the teacher of the pianoforte. The latter has only to adapt her music, whereas, the teacher of the violin must reverse the position and have the bow held with the left hand instead of the right. This, of course, is very difficult, for the teacher must reverse her own processes in order to teach it.

Craftsmen should devise ways of adjusting their instruments to the needs of the left-handed person, and the highly complicated crafts, requiring a great deal of accessory muscle coördination, should be very carefully

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graded so that they will in no way interfere with the coördinational growth.

Children should not be sacrificed to the general fear that they will be handicapped by the use of the left hand in adulthood. The majority of the professions, the majority of the crafts, hold a very special place for those left-handed people who can adapt themselves to these circumstances. There is no reason why a left-handed surgeon, for instance, with a simple change of tools, might not have a great advantage over the right-handed surgeon in some specialized field of operation. It is highly essential that we come to think of the left-handed person as a specially endowed person and not as one working under a handicap. Otherwise the great harm which is now being done to the general coördinations of this large class of our population will be continued.





## PART II



## CHAPTER I

### THE BEGINNING OF SCHOOL LIFE

**T**HE beginning of school life is a trying period in the life of the child. It may rightly be called the period of readjustment. Many wonderful processes have been going on in him. He has accomplished an astonishing amount of growth, even of the vital parts of the brain. He has acquired a certain amount of number work, in that he knows one piece of cake from two pieces of cake, and he is beginning to approximate the amount of experience necessary for social behavior along the lines of truthfulness and consideration for others and self-preservation.

He has acquired speech and the construction of his language, although the habits of speech are not permanently set in his motor mechanisms and the patterns are not yet deeply graven.

## SPEECH TRAINING FOR CHILDREN

The period on which he enters is the one in which this must be accomplished.

Up to this time the education of the child to take his place in society as an adult unit has been left to the parents and nurses and play-mates. What he did heretofore passed muster, at least most of the time. But now much of the information that he has attained must be discarded and many of the facts that he has acquired prove not to be facts when viewed in a new setting. Moreover, from sharing his empire with at most only a few other potentates, all of whom he has looked on as minors, he now has to compete with a large number, who, he soon comes to realize, have equal rights with himself. This element of competition with other children astonishes and distresses him greatly at first. It is the duty of the teacher to see that this transition stage is passed as smoothly, but as thoroughly, as possible.

### THE CHILD'S RELATION TO THE HOME

We see in the child of this period only the rather negative and indefinite personality. He

## THE BEGINNING OF SCHOOL LIFE

has passed the sweet baby years and has not yet come to the deep interest of the adolescent. Too often this feeling is shared by the parents as well as the public. It is a complaint of teachers of the second and third grades that the parents can hardly be forced to take an interest in the work of the child, and the first years of school life are interesting to the surrounding adults chiefly as they reflect their own. The adult is likely to demand reading and writing at this stage and to say the child has acquired education to the extent of which he is capable of reading his own story-books. This emphasis on reading and writing at such an early stage has not been approved by the best educators.

Terman says, "If . . . reading, which is slower still than speech, is forced upon the child at five or six, and, a year later, writing, which is still a more cumbersome mode of expression, we may appreciate something of these slow forms of expression in retarding the growth of the thought and language powers, thus causing an arrest of development." He

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says again, "Here, then, we have the primary cause of bad English . . . by forcing upon the mind permanently the slower forms of expression, reading and writing."

### THE NEED OF SPEECH

Correct practice of speech is the only one way of perfecting it. In the years from six to nine any diminution of this practice is violating the fundamental principles of learning. In answer to this the statement is often facetiously made that "children talk enough!" This may seem true to the teacher, who has a great many distracting duties, or to whom the sound of her own voice is above all other sounds, but in a room full of children each child cannot possibly have a long enough period for individual speech. In the old district school it was the custom to permit every one to read out loud for a period, in order to memorize. This unpleasant period, from the point of view of the teacher, would be of great value to the child.

Children, as you possibly remember, suffer

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very really with the desire to talk. As one child said recently, when asked how she felt in school, where she could n't talk, "I just feel like bu'stin'." Any one dealing with children in the immediate period preceding the entrance to school knows the astonishing and constant flow of speech of which the child is capable. With others, by himself or at play or at tasks, he is always talking. There is no sanctuary from his prattle. He is practising and setting in his motor-speech centers the speech material.

The sudden and very nearly entire abating of this speech flow on his entrance to school stops him in the practice of one of the most important acquisitions at a period when he can least afford to stop. An occasional free-play period is entirely inadequate. Five out of every fifteen minutes his work should be so arranged that he can use his speech mechanism if he wishes, and even be made to talk if he is not so inclined.

The acquiring of good speech is more vital than the acquiring of the ability to read or write, and should be so considered. Society



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can ill afford the attitude now entertained that a child is good only when he is quiet.

That children do feel speech pressure is shown in the torrent of talking that occurs the moment the steps of the school-house are reached. It consists of loud calling of names and useless whooping and halloing. Unfortunately, girls do not use even this method of relief as much as do boys, but they do "jabber" violently in small groups and indulge in a large amount of excited giggling, specially when overtired.

Elsie Fogarty says,<sup>1</sup> "If only we teachers could hold our tongues a little and let the children speak." She is not implying that the issuing words would be words of wisdom necessarily, but that "at every stage of school life the child must be allowed and encouraged to grow in speech." It is undoubtedly true that the only way to learn to talk is to talk. Children who are forced to listen to the voices of the teacher all day long are losing invaluable

<sup>1</sup> Fogarty, Elsie, "The Training of the Faculty of Speech, Its Place and Method in General Education."

## THE BEGINNING OF SCHOOL LIFE

opportunities to master, in the period best adapted to that purpose, not only the use of their mother tongue, but the other vital developmental conditions that can come only with speech. Terman says on the subject, "It may be well for the kindergartens to consider the enormous activity on the part of the child and not enforce silence and suppression to a point of causing arrest of development."

### THE VOICE AND SPEECH OF THE TEACHER

The voice and speech of the teacher are also vital elemental speech forces in the life of a child. The child must, of course, imitate in order to attain speech, and the teacher's voice, since it is the one heard the longest number of hours each day, has the greatest power for good or evil.

The most essential qualities for the voice of the teacher are ampleness and distinctness. The present fad of speaking in a low voice in order to retain the child's attention is without consideration for the welfare of the child. Constant strain is the only result attained.

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The child nearest the teacher, who can hear quite plainly, has an advantage over those in the rear of the room. Of course it is not necessary, in order to overcome this, that the teacher shout, but Dr. Terman says, "The teacher's voice should have sufficient force and carrying power to be heard without strain of attention in the rear of the room." Purity of tone and modulation, rather than loudness, are the essential qualities, and the correct use of the voice means not only a great deal to the child, but to the teacher as well.

Speaker's sore throat is a constant ailment, with teachers, which every orthophonist is called on to correct. It is due not only to nervous ailments and poor emotional adjustment to life, but also to the incorrect support of the diaphragm, and numerous failures in the use of the speech mechanism, such, for instance, as the constant lifting of the chest. Elsie Fogarty says with regard to this, "At one time, under the one educational authority of London alone, over one thousand teachers were found absent from causes connected with

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the bad use of the voice." This is not only a severe reflection on the judgment of the persons who leave uncorrected such serious, but remediable, conditions, but also on the community that permits this condition to arise. With correct training in the speech field during the formative years not only would the percentage of vocal troubles be relieved, but also those nervous breakdowns due to an incorrect use of the voice.

Many times, indeed most of the time, the trouble with the voice is secondary to a general nervous disorder, but occasionally this order is reversed, and if the percentage of teachers in London absent from causes connected with the voice is so high, what percentage would be found in our own school system, where virtually no emphasis is put on spoken English other than that with regard to pronunciation? For whether or not we are willing to accept the standards of British speech for our own use, we must accept the fact that in the majority of British homes very much more definite speech training is given and an infinitely better exam-

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ple set with regard to vocal quality than in the majority of homes in our own country.

In any small group of teachers there will be found a number of defective voices and speech.

Harshness is a prevalent trouble, probably due to the fact that the teacher is using the voice continually without the correct knowledge of how this use should be given. And this harsh speech reacts very unfavorably on the development of the nervous mechanism of the child. This harshness increases as the day advances. One case of nervous illness and delinquency in a boy of twelve was relieved by removing him from the room of a teacher who had an exceedingly shrill and harsh voice and from all the accompanying mental and nervous strain indicated by such a condition.

The lisping teacher is another frequent problem. Such a teacher, no matter how great her erudition and her ability to teach things other than speech, is a great hindrance to the growing child, whose speech habits are not yet set. It would seem, and it should be unnecessary for any teacher to be told, that lisping is a matter

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greatly in need of immediate correction. There is no excuse for the definite feeling of acceptance with which most people take lisping. It should, of course, be eliminated in youth, but of all the defects it is the least hopeless of attack. Intelligent and persistent work with a phonologist will bring results even in cases where there are marked malformations, and the neurotic lisping can be definitely helped with an adult who is willing to devote the time and attention to it which the disability deserves. Lisping teachers make lisping pupils, for we know that the child cannot learn the letter positions except by imitation and repetition. The stuttering teacher has no place in the teaching profession, especially where the work is with children under eighteen.

## THE SPEECH TEACHER AND THE COMMUNITY

The teacher's attitude toward prevailing local idiosyncrasies should be very carefully considered. The teacher going from one part of the country to another cannot reasonably hope to reform the section into which she is

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going. Better permit the harsh restricting "r" sound or the lack of any at all, than to offend the community and make negative the other good work that is being done. Each section has its own mistakes, but also its own virtues, and it is not uncommon to hear a teacher correcting the speech of one section and using in her own speech the vulgarisms of her own section. It is well to be diplomatic at first and point out and develop the obvious beauties of the speech of the community, leaving the correction of faults until the standing of the teacher has been established.

With the teacher born and reared in the community, the case differs, as she may, indeed should, study the speech most critically and frankly attempt to bring it up to the best standards of usage. The teacher who sets the language of the children in her own charge on the right speech path will not only deserve, but will eventually get, the special respect of the people for whom she is working.

## CHAPTER II

### THE SPEECH CLASS

**A**FTER all, the basis of speech training is sublimation rather than prohibition, and this should be borne in mind with regard to the teacher as well as the child, but a few things to be avoided, based on the rules laid down and the discussion in the previous chapters, may still not be amiss and may prevent the teacher from undoing with her left hand what she is so ardently striving to do with her right.

#### DISCIPLINE AND TENSION IN THE SCHOOL

The fundamental principle on which all disciplining is based is that the discomfort or pain inflicted must exceed in value the pleasure felt by the person in doing the forbidden thing. If discipline does not accomplish this, it has no



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value and degenerates into a sort of useless nagging, dulling the sensibilities of the child to the point of indifference. But in dealing with this problem the physiological fact must be remembered that pain, embarrassment, and discomfort, no matter whether the origin be a slap on the face or a verbal correction, if they are strong enough to attain the end of discipline, are *ipso facto* strong enough to inhibit the nervous action of the vocal apparatus.

Thus, during the period devoted to the practice of exercises for speech, it is vital that all forms of discipline be abandoned. This period of voice training should be made a little oasis in the day's routine, a relaxing moment for both class and teacher. An understanding should be reached with the class that this is to be a period of truce, a visiting period in which all are to be put "on good behavior." Contrary to the general belief, these periods of "on honor" are successful and develop surprising qualities.

It has been found practical to use the speech work as a reward of virtue, because of the na-

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ture of the plays and games and the apparent ease of the exercises. For a few days the class rowdy may take advantage, but if this occurs too often, it should be put to a vote of the class as to whether they would rather have scolding during the speech period or have the anti-social one behave, and if they decide on the latter, they should be asked to suggest punishment for the offender.

Cases of abnormal behavior, that is, the children who slink on their seats while the others stand, those who stand still while others exercise, those who are obviously bored with what the others enjoy, are cases for special consideration. A study of the behavior of such a child will suggest at once that a show of irritation is not the wisest or most effective way to deal with such cases.

If it has been necessary to correct the class for some misdemeanor that could not be ignored and the voice work cannot be postponed to a more propitious time, the use of some relaxing exercise or game in which the voice is not used is advised.

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This principle must be emphasized. It requires a direct reversal on the part of the teacher of her ideals of the value of discipline. Whatever its general value, however it may be considered in the general relation which it bears to behavior other than vocal, in the field of voice it is absolutely contraindicated.

Let me give an example of the ways in which this may be violated. Immediately after making a statement of this sort to a teacher, she was asked to conduct a class in an exercise in which the arms and voice were both used to express various emotions, such as gladness, delight, etc. She signaled to the class to rise with a sharp clap of the hands. She then stopped to say, "All eyes on me," paused, surveyed the room, and remarked in crisp tones: "Mary, William, and James! Did you or did you not hear my command? I said all eyes on me!" She then added, "As usual, you three did not obey." Needless to add, this teacher did not and was not expected to get results from speech work. Not only were the three sinners on tension, but the rest of the chil-

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dren, fearing the same treatment, were also affected.

Carping, criticizing, scolding, inhibit the voice because to a certain degree the attitude of successful self-defense is taken by the secretory bodies as well as the mind, and this requires, besides certain inhibitions and freeing of the secretions, an attitude of tension which includes tension of the diaphragm and throat and vocal cords.

The teacher's prerogative is to scold and nag. She who has consciously or unconsciously allowed this habit to fix itself upon her or who keeps a child in constant dread of such outbursts militates, by her attitude, against the welfare of the child. Terman quotes Conradi as saying, "If the school-room is a place of nervous tension, we have the ideal conditions for the onset of functional speech disturbances."

Tension is the sore spot of our civilization and doubly so of our school-rooms. Ill or nervous children are so distracted and hindered by it that they are likely to appear dull and

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stupid. The very processes of learning are hindered by fear and strain, and the constant feeling of inadequacy fostered by such a condition often renders the neurotic child actually mentally and physically ill.

No parent is justified in keeping a child under the tutelage of a teacher who nags and in other ways surrounds herself with an atmosphere of fear and tension. No school system is justified in retaining her services, no matter what may be the cause for the condition. A sympathetic, humane manner is attainable unless the person is very ill. In this case she should most certainly be considered too ill to teach. Tension is a sort of spiritual tetanus, except that in most cases it is curable, and the victim of one should no more be allowed to force herself on the community than the victim of the other.

The voice is the first to suffer under strain. The coordinations become less easy, the vocal cords tense and inelastic, the diaphragmatic movements poorly adjusted to the needs of the speech mechanism. The harsh, whiny, high, sharp voice is a natural outcome of the room

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working under tension, and the margin of safety is reduced to such an extent that nervous explosions are likely to occur.

It is for these reasons that constant and reiterated requests are made for a careless and non-exacting manner in giving the speech work. One of the surest ways for the teacher, as well as the class, to accomplish this, is the taking of frequent short exercises definitely designed for relaxing. It is also true that noise and friction in the school-room are most often the result of nervous tension, and once the art of relaxing is learned, all the work will proceed with greater ease.

The teacher who works under tension not only makes the school-room a harmful place for the child, but also retards the very work with which she, herself, desires to make a good showing. The amount of concentration for doing number work under strain would undoubtedly be found far greater than under a condition of relaxed quiet. In this day of full schedules and exacting demands this is a point to be considered.

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### LETTER POSITION

There should be no direct drill on separate letter formation, except as it is gained incidentally in exclamations used for the gaining of inflections. This rule is for normal speech, for, of course, letter substitution can be corrected in no other way. Yet a great many children with defective speech can make correctly every sound in the alphabet and cannot combine them in what we know as English speech. Even drill of separate words is not sufficient for acquiring consonant position, as many letters are pronounced in separate words which are not pronounced when the words are combined in sentences. A great deal of elision is necessary for smooth speech.

Directions for special letter correction are not given in this manual, as special work for abnormalities is not within its scope, although many of the exercises included may be adapted to the needs of the special speech teacher. Correct vowel position can best be attained through imitation of the sound heard. This

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imposes upon the teacher herself the necessity of using the correct vowel tones. The child should not be taught that "a," "e," "i," "o," "u" are the vowel sounds, since they are the symbols of some sixteen or more uninterrupted sounds. Drill, therefore, on "a," "e," "i," "o," and "u" is entirely inadequate and will remain so as long as confusing symbols are used, sounds such as the "o" in proctor and the "a" in father or in words where there is a very small difference, as in "taught" and "bought." Prolonged training of the ear becomes necessary in order to distinguish shades of sound. Careless and colloquial use of the various uninterrupted sounds must therefore be avoided.

Correctness of vowel sound is necessary for what, for lack of better terms, we call warmth and quality. Warmth and quality can only be acquired through the use of the lips and unrestricted open throat and unstrained vocal cords. These, in turn, are not easily acquired without the support of the abdominal wall.

Very few people err on the side of too great warmth of vowel tones. Though such a fail-



## SPEECH TRAINING FOR CHILDREN

ing is apparently frequently met with, the analysis will usually show it to be a substitution of one sound for another, as "St. Lou'us" for "St. Louis." There is more likelihood of failing in the other direction, as "Tinnissi" for "Tennessee," or the "ahn" for "on," "ahficer" for "officer," "whin" for "when," "jist" or "jest" for "just." Children who persist in making the wrong sound may be placed before a mirror and asked to imitate the lips of the teacher as she makes the sounds correctly. Care must be taken that the tongue is not pressed rigidly downward and backward in such sounds as "ah" and "awh."

Vowel sounds are never to be drilled except in combination with consonant sounds or with marked inflection. In exercise 40, this apparently is done, but the sustaining tone asked for produces the elision between the final consonant of the first word and the first sound (vowel) of the second word. The reason for this rule is that the preceding consonant relaxes and frees the throat of tension for the following vowel sound.

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Terman defines stuttering as the "spasmodic repetition of the initial of the word or syllable," and says, "Pedagogical maltreatment, such as ill-advised phonic drill and other faulty methods employed in the teaching of elementary reading, are among the influences predisposing to stuttering." He quotes Alexander Melville Bell as blaming the "misguided methods of instruction in reading and speaking for part of the prevalence of stuttering."

~~Very little emphasis has been put on pro-~~  
nunciation, as this field is already amply cared  
for in the school work. Certain neglected  
fields have been cared for, such as familiar  
names, which are often overlooked by the  
teacher, because in a great many cases the  
teacher mispronounces them herself. No child  
should be permitted to start through life mis-  
pronouncing the name of the town in which he  
lives. "Fluffia" for Philadelphia, "Madson,  
S'consin" for Madison, Wisconsin, "Saint  
Lou-us, Mizzoura" for St. Louis, Missouri, are  
inexcusable. Often in connection with this it  
is well that the teacher ask some unprejudiced

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person to censor her own speech before she attempts to correct that of others.

### LIP-READING

Terman concludes from statistics that from perhaps ten to twenty per cent. of the school population is seriously affected with deafness. Among the adult population this number will probably be increased. Very nearly all of those deaf or partly deaf persons become or are becoming, to a greater or less extent, lip-readers. That is, they use the organ of sight to assist or replace the organ of hearing and conclude from the use of the lips and the other facial muscles the words that are being said.

Perhaps all, normal and otherwise, use this art of reading the lips to a greater extent than is apparent. This is demonstrated continually at the moving-pictures, when the audience laughs at, or responds to, remarks made by the actors which are not flashed on the screen in print. It is also demonstrated in the common remark that "one can hear a speaker better when he can see his face." This requires only

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a brief demonstration to prove its truth, and the demonstration can easily be made by observing some distant speaker's lips with the use of opera glasses and then removing the glasses. At once the value of the use of the lips in active, normal use, not exaggerated, but never slackening, becomes apparent. Without it, a large percentage of the population is handicapped to the extent of not understanding a great deal of the conversation, and that part which is understood is likely to be confined to the familiar and the trite.

Training in lip-reading has another advantage in that, without making him the victim of too great consciousness, the child who learns lip-reading is bound to become in a sense a critic of speech. He realizes what is good speech, and the competitive element afforded by class drill in lip-reading stimulates the acquiring of it.

The use of the lips, however, is not merely a matter of courtesy. The part of the mouth from the teeth to the edge of the lips is of vital importance in the modulation and softness of

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tone. Singers utilize this principle. The lips parallel the final flare on the edge of the trombone or the trumpet or the horn of the graphophone. Warmth and roundness can be controlled to the finest degree of precision by changing the lip shape.

### READING ALOUD

Reading aloud is an essentially different process from repeating words or from spontaneous speech. Especially is this true in the early grades, when reading is exceedingly slow. Rhythm, inflection, and, on account of the slowness, elision and the enunciation of the final consonants are all affected. Even the breathing is differently controlled. Reading, then, either of rhymes, stories, or of separate words, is not to be advised if the purpose is the acquiring of good speech.

A minimum of correction for pronunciation in front of the class is essential unless the correction is given to the entire class rather than to the individual child. This is based on the fact that the child should never be made self-

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conscious or uncomfortable during speech, or inhibitions in the motor speech centers may result.

### COARSE MUSCLES

Enough has been said in previous chapters about the value of exercises for the development of coarse-muscle coördination. Their value to the vocal mechanism has also been demonstrated. It will be well to emphasize the value of exercises for arm movements as a matter of training not only for the muscles of the chest, but also for rhythm and in order to attain correlated movements throughout the muscular system.

Simple marching, as in exercise 18, is perhaps one of the best exercises to use in the ungraded rooms and with the mentally retarded. Exercise 17, for flying, should not be discarded because of crowded quarters. On the other hand, too high a standard should not be held, as children of this age are unable to do this exercise with rapidity and skill. Exercise 20 is very good for children in kindergartens, many

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variations of it already being in use. Exercise 22, in which the children's love for motion-pictures has been utilized, should not be treated as a playlet, but rather as a simple game.

### FINE MUSCLES

Any exercise including the use of speech is primarily for the coördinations of the fine or accessory muscles. This loosely put together group of exercises includes two such reduced to the simplest degree possible and other tongue and facial gymnastics and exercises for patting time.

It has not been felt to be "sound speech doctrine" to separate and call attention to the individual syllable combinations. Bell's syllables offered such an excellent way of acquiring the agility necessary in order to make constant sounds easily and well that they have been incorporated in such an exercise as will distract the attention from the primary aim and encourage the concentration of attention on the use of the imagination. Stutterers should not be given this exercise in the class.

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Patting, which is really a use of the fundamental muscles, is of an exacting nature, and requires such small movements of the muscles that it has been grouped under Fine Muscle Coordinations. Great care must be taken in assigning such exercises. Patience on the part of the teacher is essential. It should be given in short periods and no great insistence made on correctness other than that the child pay attention to directions.

Fatigue from these exercises often shows itself in giggling, and this should indicate that the patting lesson has reached its end. It must be remembered that while patting is very easy for some, it is extremely difficult for others, and one child's performance should never be judged by the standard set by another.

## INFLECTION

The pitch of the voice is high or low according to the number of vibrations of the vocal cords per unit of time. The number of vibrations is controlled by the laxness or tightness with which the cords are held. Inflection is a



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changing of the pitch from lower to higher or from higher to lower. This process is controlled only indirectly by the will.

Thus exercises for inflection are exercises for the contraction and relaxation of the vocal cords. A tense, high-strung condition of the body and throat reacts at once on the ability of the vocal cords to do their work properly. Criticisms inhibit the very inflections for which we are striving. The element of pity aroused by "The North Wind" is not destructive to relaxation, as a mild sense of pity is a pleasant rather than an unpleasant sensation. The emotion introduced by imagining a bear or a wolf in the room, as in exercise 31, is not of fear, but of mild excitement, which is stimulating rather than restricting.

Children use modulation often because they are constantly questioning their environment. If these modulations are lacking in the child's voice, there is some inhibition present or some motor disablement of the vocal apparatus or there is some retardation in the intellectual or emotional development.

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It is a very interesting fact that the inflectional modulations of the voice express certain intellectual and emotional conditions that cannot be expressed adequately, if at all, by any other means. A question to which the answer is unknown or to which the questioner does not expect the answer is always given with rising inflection. It also expresses uncertainty and doubt, and is used much in polite intercourse where the decision is left to the person addressed.

The falling inflection is used to express a determined, definite state of mind. This is not so common in young children as is the rising inflection, but it should be cultivated as the child grows older. Good falling inflection is frequent in the speech of those who are sure of themselves and who speak their convictions earnestly and with the desire to impress others. Training for inflection is a training of the mind to act in a more vigorous and definite manner. Rising inflection is also used in exclamations where strong emotions are brought into play, pain, fear, anger, etc. It is such

## SPEECH TRAINING FOR CHILDREN

changes, such modulations of the voice, that make speech interesting and catch and hold the attention.

It is obvious that courtesy often demands the suppression of our thoughts. We cannot, for instance, show our critical feelings of the behavior of others. The person who suppresses his opinions best becomes, for obvious reasons, to be considered the best bred. Unfortunately, however, the vogue for this control became great in less desirable fields. The pendulum has swung too far in the direction of control of the incorrect and too little in the direction of expression of the correct emotions.

The voice followed this same fashion. It is even to-day good form to say, "How do you do?" with much the same lack of inflection which Scripture found that the stutterer gave to it by compulsion. This attitude must be educated away. It is a mistake fostered by an incorrect idea of social desirability, and while it is not desirable that we become exponents of the "Curfew shall not ring to-night" school of elocution in our every-day

## THE SPEECH CLASS

speech, we can avoid that and still find a large margin for improvement in the inflection used in our voices.

### TONE

The exercises for tone include the exercises which seem to be purely for resonance and might be included under that heading were it not for convenience in handling. There is no way to describe beautiful tone. But a small amount of training will make it possible to detect it. Well-sounded final consonants are a great aid to attaining it. The pronounced use of the lips is also of importance. Practise the word "one" with immovable, tense lips and then with relaxed and marked use of lips, and notice the difference.

Beauty of tone and loudness of tone are not necessarily exclusive. The great demand for the soft voice is unfortunate, because so many weak, colorless voices are heard in private life. The public speaker soon learns that warmth, carrying quality, and, in fact, all the desirable vocal traits may be present in either

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loud or soft voices. The voice to which there is such a great social objection is not so much the loud voice as the loud, harsh voice. The harsh, whining voice, which is often called nasal, is equally objectionable.

### RESONANCE

Lack of resonance may be due to a large number of causes: a continued misplacement of the soft palate, which may minimize the use of the nose as an air passage, a diseased condition of the sinuses that has caused closures or solidifications, adenoids, high dental arch, deflected septums, and enlarged tonsils, may all be responsible. Often when conditions cannot or are not remedied by surgical procedure, the very best use made of the equipment which one has will offer a decided improvement. Stoppages of the nose are rarely so complete but that training will help the conditions.

Terman<sup>1</sup> quotes Dr. Bresgen as saying that "nasal or pharyngeal obstructions are at the bottom of nearly all speech defects." He

<sup>1</sup> Terman, "The Hygiene of the School Child," page 341.

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thinks that besides offering resistance to the sound waves, such obstructions render less easy the use of the muscles called into activity for phonation and articulation. It is very certain that those stoppages of the nose and inactivities of the palate constitute one of the most unpleasant of speech disorders.

Exercises for resonance are among the most important in the manual. Just what part resonance plays in the beauty of the voice cannot be stated definitely, but any one can demonstrate for himself the lack of beauty when the resonance is interfered with, as in the case of common colds. Exercises for resonance require for their success the same degree of playful relaxation that is required for the exercises directly for relaxation. They may be given a small amount of the time whenever voices of the class seem soft and weak. Exercise 42, called "Playing Peddler," may be given a few moments at a time to waken and stimulate the class on dull days.

## SPEECH TRAINING FOR CHILDREN

### INFORMATION

It is felt inadvisable that the young child should be given any extensive knowledge of the mechanism of speech, either physical or mental. Such information as may safely be given has been pointed out in exercises Nos. 60 and 61. These will aid in training the discrimination of the child and make possible the correction of certain very limited faults.

### PROGRAM

It was felt by the authors that in arranging the work for the public schools as much latitude as possible should be given the teacher for an expression of her own ingenuity and resourcefulness. This seemed only fair as a partial compensation to the teacher for adding another study to her already full schedule.

The following lesson table may be used as rapidly or as slowly as the teacher finds advisable, the only invariable rule being that no exercise be given in advance of its present position, although it is permissible to repeat an

## THE SPEECH CLASS

exercise if necessary, after it has been introduced on the table guide.

The teacher should not attempt to memorize the stories. The interest of the children will be held sufficiently well during the reading, and it is during the following drill that the arousing of a great deal of interest is desirable. The loss of interest on the part of the child as a result of reading is of small moment compared to the loss of interest on the part of the teacher, if she be forced to memorize stories and rhymes that might as well be read.

“Phonic” drill of any sort is to be avoided. It will be seen at once that a separation of the initial consonant, especially with repetitions, is one of the processes common in stuttering. Any practice of this sort *must be detrimental* and is, therefore, contraindicated.



# TABLE GUIDE FOR KINDERGARTEN

For Lesson No.	Use Exercise No.	For Lesson No.	Use Exercise No.
1.....	4 and 61	23.....	4
2.....	61 and 5	24.....	17, sentinels of 7
3.....	4	25.....	49
4.....	5	26.....	31 and 6
5.....	2	27.....	20
6.....	7	28.....	35
7.....	2, sentinels of 7	29.....	18
8.....	6	30.....	26
9.....	4, new flowers	31.....	45
10.....	31	32.....	3
11.....	5 and 2	33.....	37
12.....	33	34.....	38
13.....	18	35.....	31
14.....	31 and 61	36.....	4
15.....	31 and 17	37.....	33
16.....	20	38.....	6
17.....	59	39.....	2
18.....	41	40.....	45
19.....	56	41.....	24, 59
20.....	2	42.....	18
21.....	24	43.....	31 and 26
22.....	31	44.....	35

## TABLE GUIDE

For Lesson No.	Use Exercise No.	For Lesson No.	Use Exercise No.
45..... 7		48..... 14	
46..... 56		49..... 26 and 18	
47..... 35		50..... 31	

## TABLE GUIDE FOR FIRST GRADE

1..... 4 and 61	20..... 25 and 15 and 14
2..... 61 and 60	21..... 1
(parts 1 and 2)	22..... 22 and 27
3..... 15 and 14	23..... 4 and 23
4..... 46 and 15	24..... 35 and 2
5..... 37 and 46	25..... 23 and 17
6..... 47 and 14	26..... 56 and 51
7..... 56 and 31	27..... 31 and 37
8..... 31 and 34	28..... 32 and 20
9..... 37 and 15 and	29..... 23 and 32
14 briefly	30..... 39 and 37
10..... 56 and 34	31..... 40 and 17
11..... 25 and 18	32..... 32 and 39
12..... 25 and 26	(no lining)
13..... 26 and 46	33..... 31 and 30
14..... 25 and 17	34..... 33 and 56
15..... 47 and 25	35..... 57
16..... 55 and 18	36..... 30 and 57
17..... 27 and 26	(sentinels only)
18..... 5 and 4	37..... 41 and 40
19..... 13 and 17	38..... 40 and 39

## SPEECH TRAINING FOR CHILDREN

For Lesson No.	Use Exercise No.	For Lesson No.	Use Exercise No.
39.....	51 and 17	48.....	14 and 2
40.....	32 and 40	49.....	4 (with new flower names)
41.....	49	50.....	31 and 40
42.....	37 and 25	51.....	49
43.....	26 and 18	52.....	52 and 23
44.....	27 and 31	53.....	55 and 52
45.....	23	54.....	27 and 18
46.....	15 and 6	55.....	7
47.....	12	56.....	1 and 4

### TABLE GUIDE

#### FOR SECOND GRADE

1.....	4 and 26	15.....	44 and 17
2.....	8 and 15	16.....	26 and 31
3.....	16 and 4	17.....	36 and 27
4.....	56 and 2	18.....	28 and 50
5.....	16 and 25	19.....	43
6.....	23	20.....	40 and 8
7.....	25 and 17	21.....	3 and 37
8.....	50 and 26	22.....	39 and 40
9.....	27 and 34	23.....	23 and 60
10.....	31 and 25		(parts 3 and 4)
11.....	39 and 27	24.....	21
12.....	40 and 31	25.....	11
13.....	26 and 15	26.....	23
14.....	43	27.....	15 and 16

## TABLE GUIDE

For Lesson No.	Use Exercise No.	For Lesson No.	Use Exercise No.
28.....	25 and 26	41.....	10 and 2
29.....	19	42.....	61 and 32
30.....	9 and 14	43.....	21
31.....	43	44.....	15 and 48
32.....	53 and 42	45.....	43
33.....	52 and 42	46.....	37
34.....	37 and 40	47.....	14 and 36
35.....	43	48.....	32 and 35
36.....	58	49.....	42 and 32
37.....	31 and 58 (sen- tinel words only)	50.....	2 and 17
38.....	26 and 58 (sen- tinel words only)	51.....	4 and 28
39.....	19	52.....	38 and 42
40.....	9 and 3	53.....	2 and 3
		54.....	17 and 13
		55.....	22

## INSTRUCTIONS FOR GIVING EXERCISES

- (A) 1. *Rhymes* should first be read to the class.  
(This may be omitted where the rhyme has a distinct element of surprise.)
2. The rhyme should then be read line by line, the class repeating, with special attention to inflection.  
Interest may be stimulated by assigning a line to each group or having each group try the same line.
3. The sentinel words or phrases (those in italics) should be given by the teacher and repeated by the class.
4. Incorrectly pronounced words, especially those pointed out at the foot of the rhyme, should be drilled.
5. Troublesome letter sounds should be used in suitable words, and drilled, other suitable words being selected as the first is accomplished. Such sounds should not be drilled separately.
6. The rhyme should then be repeated correctly, after the teacher, line by line.  
*This order* should not be reversed, as the attention required for the building-up process,

## GIVING EXERCISES

which would then be substituted, seems greater than is desirable.

- (B) 1. The sentinel words or phrases should then be given voicelessly, with natural lips. Any mouthing of the words makes the exercise at once more harmful than helpful. The teacher should practice in front of the glass and for some friend, in order to be sure that no unnatural use of the lips occurs.

Final consonants are of greatest importance and should be demanded of both the teacher and the child:

2. The teacher may say: "I am going to say the word 'well' without your hearing me. See if you recognize it." After a group of three or four words have been given similarly she may say: "I am going to make one of those words again. See if you can tell me which one." After it has been correctly guessed, she may say, "Now I am going to make it for you all to see."

It must be remembered in selecting words, that certain letters, such as b and m, appear the same.

3. Call some child forward to give a word voicelessly to the class. He should first whisper it softly to the teacher in order that she may make sure it is not too hard.

Parts (A) and (B) may be reversed if desired.

- (C) Exercise 29, "Lining," may be used for a few

## SPEECH TRAINING FOR CHILDREN

moments, making use of some line in the lesson.

- (D) Attention to phrasing is most important. The shortest phrasing possible should be used at first, and longer ones introduced as the vowel value and tone are increased and the breathing becomes more controlled.
- (E) *Stories* "Why the Lady-Bug did n't Fly Away" and "The Dog that Got Lost" should be read to the class and then instructions in (A) 3, 4, and 5 be followed. "The Greedy Little Sister Pig" should be given according to the instructions accompanying it.
- (F) *Plays and games* should be given according to individual instructions accompanying each.

### EXERCISES

#### RELAXATION

##### EXERCISE I

RAGGITY DOLL (By M. G. B.).

Let's play rag-doll,  
Don't make a sound!  
Fling your arms and bodies  
Loosely around.  
Fling your hands! Fling your feet!  
Let your heads go free!  
Be the raggest rag-doll  
You ever did see.

## GIVING EXERCISES

The teacher should read this rhyme aloud and then re-read it while the children interpret with arms, head, and bodies. They should then be taught to do it standing, then marching. Parts of this may be used in emergencies to start lessons when for some reason the room has been under special tension.

### EXERCISE 2

#### PLAYING RAG-DOLL

This requires the use of "play magic," which the teacher makes by waving her arms. With one wave the feet turn to rags, at the second the knees, then the back, arms, elbows and hands, neck and head, in the order given.

The teacher then goes on a tour of inspection, gently shaking arms, shoulders, heads, and lifting knees to be sure all are relaxed. Some she will find "made of paper," some of wood, some of rags, but highly starched. Then with one magic wave the room must be waked up and the exercise repeated.

### EXERCISE 3

#### PLAYING SCARECROW

"Magic" is again utilized as in Exercise 2, this time in order to turn the children into scarecrows. This exercise is done standing with arms at right angles, stiff and tense, the hands, head, chest, etc., limp. At a signal the wind blows, to which the scarecrows wave gently.



## SPEECH TRAINING FOR CHILDREN

### EXERCISE 4

#### FLOWER MAGIC

Rows, tables, or groups, are assigned flowers or are permitted to choose the flower they prefer. The teacher then turns them into the flowers decided on, row by row. They then play it is night and all the flowers asleep, also the "stems and leaves," and with eyes shut they wait for the sun to come up. The teacher says "the sun is coming slowly, slowly up," and sees that the children straighten very slowly. The wind is then made to blow and the flowers with it. Some competitive spirit may be aroused as to which row, never which individual child, makes the nicest flowers. New flowers may then be assigned and the process repeated.

## VOWEL POSITION

### EXERCISE 5

#### BOW WOW WOW

(also for inflection, tone, and pitch)

*Bow, wow, wow!*

*Whose dog art thou?*

*I'm little Tommie Tinker's dog,*

*Bow, wow, wow.*

As this rhyme is very familiar to the children, they are inclined to use a singsong tone in saying it. This must be avoided. The candle exercise (No. 56) must

## GIVING EXERCISES

be used for "whose." Tommie Tinker must not be called Thommie Thinker by the lisps. The final "t" in "art" must be drilled. The words "*bow wow wow*" may be said first on one pitch, then on another, first soft, then loud, first near at hand, then far away.

### EXERCISE 6

#### LITTLE FISHES

(also for consonant position)

*Little fishes* in a *brook*,  
*Brother* caught them with a *hook*,  
*Mother* fried them in a *pan*,  
*Father* ate them like a *man*.

The sentinel words here offer good drill combinations for change of lip position, when they are given in pairs. Avoid a singsong in this also.

### EXERCISE 7

#### THE STORY OF THE GREEDY LITTLE SISTER-PIG

(By M. G. B.)

(also for lip-reading)

Once upon a time there was a greedy little sister-pig, who lived in the woods. And she was so fond of eating that she ate up all the food that belonged to the other animals.

The Lamb would look at the little Pig and say, "*Ba, ba*, I only wish I were as fat as sister Pig."

## SPEECH TRAINING FOR CHILDREN

And the little Chicken would look at her and say, "*Peep, peep*, sister Pig has all my food too."

And the Hen would say, "*Cluck, cluck*, don't you mind, child."

And the Crow would say, "*Caw, caw*, I'll fly away and get something somewhere else."

And the Dog would say, "*Bow, wow*, I never was so hungry in all my life."

And the Bird would say, "*Twit, twit*, I wish I had as much food as sister Pig."

The Goat came up one day and tried to get some of the food, but sister Pig only ate faster and faster, until the old Owl said, "*Hoot! Hoot!* Trouble will come to you yet!"

Finally, one day there was a great noise in the woods. The creatures thought they saw an animal in the underbrush. The Owl said (What did he say?), "*Hoot, Hoot,*" and the Goat said (What did he say?), "*Ma-a-a,*" [with sustained breath], and the Bird said (What did he say?), "*Twit, twit,*" and the little Chicken flew to the mother Hen and said (What?), "*Peep, peep, peep, peep.*"

And the big black Crow raised up in the air and said:

"Now we will see what we will see, *caw, caw.*"

But it did n't occur to the little Pig to be frightened; she just kept right on eating until the Lion was right at her, and he said:

"*Gurr-rr-rr*, you are the fattest old thing I've ever seen." And he ate her up from tip to tip, and the

## GIVING EXERCISES

Crow leaned back in the tree and laughed, "*Aw, haw, haw, haw, haw, haw!*"

Instructions for giving:

The sentinel words should be made with special care. The story should be read aloud by the teacher and the children asked to supply the correct animal sounds from the paragraph beginning, "Finally, one day," or wherever the question is indicated. If the children do not remember the sounds or do not give the correct ones, the teacher should make the words voicelessly and ask them to read from her lips what they are. *Ma* and *ba* appear the same and *gurr* is very difficult because unfamiliar.

This work should not be made the least exacting, as the voiceless drill is new to them.

The animal sounds should be drilled several times, both as though the sounds were coming from a distance and as though they were close. They should not be permitted to use a raucous voice for the *caw* sound, and the final laugh of the Crow. "*Ah, haw, haw, haw,*" should be repeated with active use of the diaphragm.

## CONSONANT POSITION

### EXERCISE 8

There *was* a *crooked* man  
Who *walked* a *crooked* mile  
And *found* a *crooked* sixpence  
Beside a *crooked* stile.

## SPEECH TRAINING FOR CHILDREN

He *bought* a *crooked* cat  
Who *caught* a *crooked* mouse  
And they all lived together  
In a little crooked house.

Assign a line to each row or group and let the class suggest which says it most correctly. This is an excellent exercise for Russian Jewish accent where *cw* is substituted for *cr*. Drill in combinations

walked—crooked  
found—crooked  
crooked—cat

Probable mispronunciations: *wuz* for *was*, *mi-ul* for *mile*, *littul* for *little*.

### EXERCISE 9

(also for inflection)

What are *little* girls made of?  
*Sugar* and *spice* and all things *nice*.  
That's what little *girls* are made of.

What are little *boys* made of?  
*Scissors* and *snails* and puppy-dogs' tails.  
That's *what* little boys are made of.

This exercise should not be given until the majority of the lispsers have been reeducated. Attention may be called to the difference in sound between the "s" in scissors, etc., and the "th" which is the way that

## GIVING EXERCISES

lispers make it. When it has been drilled through for words and combinations it may be drilled line for line with marked and very much exaggerated inflection, letting the class decide which interpretation is most desirable. Subtlety is not to be insisted on.

Probable mispronunciations: littul for little, ni-us for nice, tay-uls for tails, uv for of, ting for thing, wat or wut for what. In drill for the latter use the candle exercise No. 56.

### EXERCISE IO

#### HEARTS AND KEYS

(for inflection also)

*Hearts*, like doors, will *ope* with *ease*

To *very, very* little *keys*.

And don't forget that two of these

Are "*I thank you*" and "*If you please.*"

Practise with special attention to the "h" sounds at the beginning of "hearts," using marked diaphragmatic motion. Have each child place his hands, one on the pit of the stomach and one on the chest. The one on the chest should move outward, the one lower down should move inward. The upper hand should be held stationary.

For inflection get the views of different members of the class as to the way in which each line should be said. Stimulate the members of the class to express themselves as to the prettiest way of saying it.

## SPEECH TRAINING FOR CHILDREN

Remember that when the members of the class are expressing themselves on any subject they are getting excellent practice in speech work.

### EXERCISE 11

*Some little mice sat in a barn to spin.  
Pussy-cat came by and popped his head in!  
"Shall I come in and bite off your threads?"  
"Oh no! kind sir, you might bite off our heads!"*

Drill mice—sat

some—mice (show how final "m" sound is merely prolonged when followed by an "e-m" sound.)

come—bite (show similar condition in "m-b.")

Drill as Exercise 10 for inflection and with prolonged "m" and "n" sounds as are exercises under TONE.

### EXERCISE 12

#### THE MAGIC PLAYGROUND (By M. G. B.)

One rainy day at recess the children stood at the window and looked out at the playground and wished that they could go out and play. Mary looked at the *swing*, and Sam looked at the *see-saw*, and Albert looked at the *slides*, but it was no use, for they could not go!

All the *Second Grade* had been making a garden, and they looked at the *spade* and the *hoe* and the *rake* and wished that they could *work* the ground.

Now the things on the playground were *fairy things*,

## GIVING EXERCISES

and they looked up at the *windows* and *saw* that the children were unhappy, and so the *swing* spoke to the *slide* and the *slide* whispered to the *totter-board* and the totter-board passed the word along to the *see-saw* and the *see-saw* said something to the *shovel* and the shovel to the other garden *tools*, and all of a *sudden* the children began to *shout* for joy, for they *saw* the *swing* begin to *swing* and the see-saw began to see-saw and the slide slid and the totter-boards tottered and the *shovel* and the *hoe* and the *rake* began to *dig* the *garden*, and *just* then the *sun* came out from under a cloud and the rain *stopped* and the children all ran out of the door and had the happiest ten minutes of all their lives.

Read the story aloud and follow by drill on the *sentinel* words after asking the following questions:

What were the things on the playground?

Name some of them.

When they saw the children were unhappy, what did they do?

What did the swing do? the slide? the shovel? etc.

Drill the following words in pairs:

swing—swung

slide—slid

see—saw

shovel—shout

Probable mispronunciations: *windah* or *winduh* for *window*, *cud* for *could*, *childern* for *children*.



## SPEECH TRAINING FOR CHILDREN

### EXERCISE 13

WHY THE LADY-BUG DID N'T FLY AWAY (By M. G. B.)

One *Spring* not very long ago a *Lady-bug* got up in the morning and after *washing* her *children's faces* went out to see what she could get to eat. After she had gone a *short distance* she sat down to rest on the leaf of a lilac-bush. She had n't been there but a minute when a boy came along and began suddenly to *shout* in her ear:

*"Lady-bug, Lady-bug,  
Fly away home.  
Your house is on fire  
And your children will burn."*

Of course she flew home as *fast* as her little wings would carry her, but when she got home the house was n't on fire and the children were perfectly *safe*.

She started out again, a little out of breath, and she had gone quite a good way this time when she sat down on a gate-post to straighten her spots. And while she was sitting there a little girl came skipping along the path and called to her:

*"Lady-bug, Lady-bug,  
Fly away home.  
Your house is on fire,  
And your children will burn."*

*She was* terribly *frightened* and went *huffing* and *puffing* over the *bush-tops*. But *when* she reached

## GIVING EXERCISES

*home* her house was not on fire and her children were *perfectly safe*.

And so *she* tied her bonnet-*string* under her chin and took her market-*basket* under her wing and *set* out *across* the *grass*.

Suddenly a *wasp*, who lived in a tree near the Lady-bug's house saw a *wisp* of smoke coming out of the roof, and he flew with all his might and main to tell the lady-bug to come home. But *she* would n't pay any *attention* to him at all. "I've heard that twice already this morning," *she said*, as she lifted her *skirts* over a dewy spot on the *grass* and walked on.

And if it had n't been for the *black-beetle*, who *rescued* all the lady-bug's *twenty-five* children, they would have been completely burned up.

Sentinel words are chosen here for drill on similar positions. Drill in pairs,

wasp—wisp  
huffing—puffing  
black—beetle  
perfectly—safe

Spring and distance should be drilled for resonance, humming until the vibration is felt in the nose and hard palate.

A great deal of time should not be put on this little story, as it is told here as an introduction to an exercise under coördinational exercises.

# SPEECH TRAINING FOR CHILDREN

## COARSE COÖRDINATION

### EXERCISE 14

#### LAUGHING

(For coördination and control of diaphragmatic muscle)

The first syllable should be passive and long-drawn out; the last three with active, inward, jerking movements of the abdominal wall. Care should be taken to stop the exercise before hiccuping results.

1. ah—ha, ha, ha,
2. ah—ho, ho, ho,
3. oh—ha, ha, ha,
4. aw—haw, haw, haw,
5. eh—he, he, he.

### EXERCISE 15

#### PLAYING ORANG-OUTANG

Breathe deeply and beat the chest with clenched fists, making:

1. *m* sound, with mouth shut,
2. *oh*, with mouth slightly open,
3. *waugh*, with mouth wide open,
4. *ugh*, with mouth nearly closed.

### EXERCISE 16

#### PLAYING GIANT

Breathe deeply and say, "*Fee, fie, fo, fum,*" continuing the last syllable until breath is exhausted.

## GIVING EXERCISES

Repeat on pitch higher. Repeat on different pitch. Vary in this way about fifteen different times, always bearing in mind the range of a child's voice.

To make the breath last a long time it is necessary to support the abdominal walls well and waste as little breath as possible on the first three syllables, especially the first.

### EXERCISE 17

#### FLYING

1. Hold the arms at right angles to body, on a straight line with shoulders, and move them up and down with flying motion to count 1, 2, 3, 4, 5, 6, 7. Repeat five times.

2. Repeat on tiptoes, walking one step with each movement of the arms. See that strict time is kept.

3. Repeat, running on tiptoes. This must be done silently "as birds fly." The teacher's voice counting to seven should be the only sound. The children should be taught to stop abruptly on 7, and remain poised on the toes.

4. Repeat to the rhythm "Lady-bug, Lady-bug," running first forward, then backward. Perfect time must be required.

### EXERCISE 18

#### KING, QUEEN, AND SOLDIERS

1. A variation for simple marching. A King and Queen are selected, who pat for the others to march. And those who do not march correctly are corrected

## SPEECH TRAINING FOR CHILDREN

by the King and Queen. In this way the powers of observation are stimulated.

2. A General is selected to lead the soldiers and, if he can, to complicate the line of march somewhat. This should not be done until the first exercise has been thoroughly learned and all can march moderately well to simple time.

3. King and Queen pat first fast, then slow, first single time, then double time.

The teacher is to remember in this play that she is only the power behind the throne.

### EXERCISE 19

#### CLIMBING THE LADDER

A ladder is chalked on the floor. At first ten, then twenty, rungs may be drawn and each rung numbered. With hands on waists the children hop from rung to rung, leaning over as one would if hopping up an incline. They should each count the rung on which he is hopping; more than one can hop at once, but must not become confused by the counting of the others. To let down the foot or forget to count or become confused in counting is the same as falling off the ladder.

### EXERCISE 20

Jack be *nimble*,  
Jack be quick,  
Jack *jump* over  
The *candlestick*.

## GIVING EXERCISES

1. The sentinel words here, nimble, jump, candle, may also be hummed for vibrations.

2. Used as play for very small children, a candle is chalked on the floor, or imagined, and while the circle chant the rhyme, one selected child jumps over the candle. He must jump when the others clap, first on "jump," then "over," then "candle."

3. When the first and second exercises have been done pretty well, he may be required to jump three times, once on each time the word "Jack" is spoken. The circle must clap to this.

As most of the children wish to do this at once, the expedient of letting each third child try, so that no one may feel anybody is playing favorites, is utilized.

On dull days this exercise may be used to start some other lesson.

### EXERCISE 21

#### THE HOBBY HORSE (By M. G. B.)

- |                  |                                 |
|------------------|---------------------------------|
| 1. walk          | A hobby horse on which to ride, |
| 2. walk          | To ride where'er I will.        |
| 3. double time   | I run him on the shady side,    |
| 4. walk          | But I walk him up the hill!     |
|                  |                                 |
| 5. rt. foot skip | A saddle made of leather!       |
| 6. lt. foot skip | A bridle made of string!        |
| 7. double skip   | I ride him in all weather,      |
| 8. double skip   | And he never does a thing.      |

## SPEECH TRAINING FOR CHILDREN

- |               |                                  |
|---------------|----------------------------------|
| 9. walk       | I feed him bits of orange peel,  |
| 10. cut up    | I whip him with my finger,       |
| 11. full skip | And yet I know he does not feel, |
| 12. full skip | Or here he would not linger.     |

The teacher should memorize this rhyme, and forming the class in single or double line, with herself as leader, she may say it or chant it, giving the interpretation in the margin or others which she may invent.

If the movements as given seem difficult at first or for some reason not adapted to conditions, such as the size of the room, slower and simpler movements may be substituted. It is excellent training for the coördinations, however, to learn to move rapidly in a small space, and should be done whenever conditions will permit.

### EXERCISE 22

#### MOVING-PICTURE

#### *The Lady-bug and Her Children* (in three episodes)

Characters: The Lady-bug, the Little Girl, the Little Boy, the Wasp, the Black-beetle, and the Lady-bug's children (all those children not otherwise employed).

Episode 1. The Lady-bug puts on her hat and says, "Good-by, children." (visible speech only)  
Children, "Good-by, Ma-ma." (also soundless)

## GIVING EXERCISES

The Lady-bug then flies across the room to a window, which is to serve as the lilac-bush.

The Boy (walking over and pretending to discover her) shouts in her ear:

“Lady-bug, Lady-bug,  
Fly away home.  
Your house is on fire,  
And your children will burn.”

The Lady-bug is terribly frightened and flies home. The Little Boy takes his seat and becomes one of the Lady-bug-children.

Episode 2. Lady-bug, “Good-by, children.” (soundlessly)

Children, “Good-by, Ma-ma.” (also soundlessly)

The Lady-bug flies to second window, which serves as the gate-post and pretends to straighten her little black spots.

Little Girl skips to her, and shouts (children joining):

“Lady-bug, Lady-bug,  
Fly away home.  
Your house is on fire,  
And your children will burn.”

Lady-bug, terribly frightened and wringing her hands, flies home. Little Girl goes to



## SPEECH TRAINING FOR CHILDREN

her seat and becomes one of the Lady-bug-children.

Episode 3. The Lady-bug pretends to be much disgusted.

Lady-bug, "Good-by, children." (soundlessly)

Children, "Good-by, Ma-ma." (also soundlessly)

Lady-bug ties her bonnet under her chin, takes up her market-basket, and goes to the third window or desk or other convenient spot.

The Wasp comes forward and peers at the children from under his hand. He then flies to the Lady-bug, saying, "*Buzz, buzz, buzz,*" all the way.

The Wasp:

"Lady-bug, Lady-bug,  
Fly away home.  
Your house is on fire,  
And your children will burn."

(All children join in saying the rhyme.)

Lady-bug, "I've heard that twice before this morning and don't intend to pay any more attention to you."

She lifts up her skirt, steps over the dewy spot, and walks on.

Black-beetle, coming forward:

## GIVING EXERCISES

"Fly, children!  
Fly with me!"

(The children all rise very silently and fly as taught in exercise No. 7 until they are standing around the wall.)

No special memory work should be required, as this is to be given more as a game than as a playlet. If given more than once, all parts should be reassigned so that no one may become filled with the idea that they are established actors. It should be read through to the class and then the parts assigned and the children told what to do as they go along. Better to dispense with it entirely than make it formal.

## FINE COÖRDINATION

### EXERCISE 23

#### PLAYING INDIAN

(also for consonant sound)

1. First comes the Indian language,

*ta ba-ta*  
*ba ka'-ba*  
*ka-pa'-ka,*

always with the accent on the second syllable. Other consonant sounds may be substituted; more than three at a lesson should not be added. These "Indian words" may be said with true Indian craftiness, Indian contempt at the fearfulness of the whites, Indian fierce-

## SPEECH TRAINING FOR CHILDREN

ness as he removes a scalp, Indian scorn at the suggestion of parley, touching Indian tenderness as the Pipe of Peace is smoked.

2. When the simple forms have been mastered,

*ta'ba, ta ba'ta,*  
*ba'ka, ba ka'ba,*  
*ka'pa, ka pa'ka,*

accent on first and fourth syllables.

3. With bent knees and hands on hips the Indian talk can be chanted while the Indian goes on a scalping-party or stalks animals. Strict time should be insisted on. Aside from this, let the child have as free play for his own ideas as possible.

### EXERCISE 24

#### PLAYING COPY-CAT

A not infrequent game on the playground and at home is here utilized. The children are asked to do just what the teacher does. The teacher "catches" them if they do not and scores against them if she does catch them. Individual score is not kept, but one for the teacher and one for the class. The teacher may utilize any exercise or part of the exercise given before, such as exercises 27 or 28.

### EXERCISE 25

Coördination is improved by beating time with hands and feet. Stutterers must be excluded from this in

## GIVING EXERCISES

class work. When working alone with stutterers this may be used judiciously.

1. Pat first with right hand and right foot simultaneously on 1, with left hand and left foot simultaneously on 2.  
Repeat five or ten times.
2. Pat with right hand and left foot simultaneously on 1, with left hand and right foot simultaneously on 2.  
Repeat five to ten times.
3. Pat left hand on 1 and 2.  
Pat right hand on 3.  
Pat left hand on 4.
4. Pat right hand on 1 and 2.  
Pat left hand on 3.  
Pat right hand on 4.
5. Pat right foot on 1 and 2.  
Pat left foot on 3.  
Pat right foot on 4.
6. Pat left foot on 1 and 2.  
Pat right foot on 3.  
Pat left foot on 4.

### EXERCISE 26

#### PLAYING BUMBLEBEE

Pout the lips and make a very soft, unformed "oo" sound. Move the lips rapidly with the tip of the first finger, making the familiar "*blub, blub*" sound that children enjoy. The upper lip should be used as well as the lower.

## SPEECH TRAINING FOR CHILDREN

### EXERCISE 27

#### PLAYING MECHANICAL TOY

(facial gymnastics)

1. Open eyes } together }  
Open mouth } } alternate rapidly  
Close eyes } together } } five times.  
Close mouth } }
2. Open eyes } together }  
Close mouth } } alternate rapidly  
Close eyes } together } } five times.  
Open mouth } }
3. With tongue lax and mouth shut, breathe in through nose.  
Open mouth and breathe out through mouth.
4. With tongue lax and mouth open, breathe in through mouth.  
Shut mouth and breathe out through nose.

### EXERCISE 28

(for facial muscles)

1. Make a sound like a train whistle away off.  
*he—oo, he—oo.*
2. Make the following sounds rapidly and with sufficient breath, well supported.

## GIVING EXERCISES

a—moo, moo, moo,

e—mo, mo, mo,

e—moo, moo, moo,

a—loo, loo, loo,

oo—la, la, la.

Repeat several times.

## INFLECTION

*Instructions for giving the following rhymes.*

1. Read each line in a monotone, asking some child to give the correct inflection. After having got an expression of opinion from two or three, correct or approve each, being as diplomatic as possible, and ask the children to decide which inflection they consider the most attractive.
2. Line as in Exercise 29. Leave the marking for the entire verses on the board. Go over with a pointer and let the children interpret the lining as they repeat the verse. This will require assistance from the teacher at first.
3. For tone, chant with accentuated lip movement, prolonging final consonant sound.

### EXERCISE 29

#### LINING

(for visualizing inflection)

Say the first line of "Mary Had a Little Lamb" with pronounced inflection. Ask the children whether the

## SPEECH TRAINING FOR CHILDREN

voice went up or down, and with chalk mark on the blackboard as they dictate.

as <i>Ma</i>	<i>la</i>
<i>r</i>	<i>m</i>
<i>y had a little</i>	<i>b</i>
or	<i>la</i>
<i>y</i>	<i>lit</i>
<i>r</i>	
<i>Ma</i>	<i>had a tle</i>
	<i>mb</i>

As it is being marked with chalk have the class repeat it and mark with finger in the air. After a little practice ask them to interpret familiar phrases, "Good morning, children," and similar combinations. This exercise is not successful with the kindergarten, but is well done and well received in the first and second grades. It should not be too prolonged.

A child may be called to the board to "line" and phrase some sentence which has been said nicely. The sense of criticism will thus be awakened.

### EXERCISE 30

#### PLAYING BIRTHDAY

(also for poise)

Question by teacher, "Who has a birthday in May?"

Answer by child, standing, "I have a birthday in May."

Repetition by class, "Mary has a birthday in May."

## GIVING EXERCISES

Repeat with different months.

This is quite popular. A little diffidence may be overcome by asking, "Is there any one in the class who never has a birthday?" Occasionally a child may claim every month. Do not be too great a stickler for the truth in these exercises. Remember they are all play to the children.

### EXERCISE 31

#### EMOTIONAL EXPRESSION

(for coördinations also)

1. Ask the class to imagine that  
They see a rainbow, and say, "Ah," on rising inflection.  
They see a rainbow, and say, "Oh," on falling inflection.
2. They see a bear coming into the room, and say,  
"Oh," on rising inflection.  
They see a bear coming into the room, and say,  
"Oh," on falling inflection.
3. You have a water melon for them, and they say,  
"Ooh," on rising inflection.  
You have a water melon for them, and they say,  
"Ooh," on falling inflection.
4. You dropped and broke it, and they say, "Awh,"  
on rising inflection.  
You dropped and broke it, and they say, "Awh,"  
on falling inflection.

To take this the class should be standing, arms at



## SPEECH TRAINING FOR CHILDREN

side. The arms should go up to a level of the shoulders when the voice goes up and down when the voice goes down.

The exercise should be varied and all the vowel sounds gone through, with the situations varied from day to day. The small affairs of school life may be introduced and all the animals in the zoo introduced.

Show rage, hate, fear, sorrow, disappointment, happiness, in this way, for the varied inflections obtainable.

Some ingenuity on the part of the teacher in arranging modifications of the exercises to suit conditions is necessary.

### EXERCISE 32

#### NUMERICAL INFLECTION

(for coördinations also)

- I. This exercise should be taken standing, toes slightly out, hands on hips.

Rising on toes as the class says:

I on rising inflection. . . . . 2, 3, 4, 5, on monotone  
I on falling inflection. . . . . 2, 3, 4, 5, " "  
1, 2, on rising inflection. . . . . 3, 4, 5, " "  
1, 2, on falling inflection. . . . . 3, 4, 5, " "  
1, 2, 3, on rising inflection. . . . . 4, 5, " "  
1, 2, 3, on falling inflection. . . . . 4, 5, " "  
1, 2, 3, 4, on rising inflection. . . . . 5, " "  
1, 2, 3, 4, on falling inflection. . . . . 5, " "  
1, 2, 3, 4, 5, on rising inflection.  
1, 2, 3, 4, 5, on falling inflection.

## GIVING EXERCISES

2. With arms, as in exercise 30.
3. With arms going up as voice goes down and vice versa.

### EXERCISE 33

#### LITTLE BO-PEEP

(for consonant position and tone also)

Little *Bo-peep* has lost her sheep  
And can't *tell where to find* them.  
Leave them alone and they will come *home*,  
Wagging their tails behind them.

Give with accentuated use of the lips, taking special care of the final consonants.

Probable mispronunciations: ware for where, um or em for them, tai-uls for tails, dey for they, waggen for wagging.

### EXERCISE 34

#### THE NORTH WIND

(for tone also)

The *north wind doth blow*,  
And we shall *have snow*,  
And *what* will the *robin* do then,  
Poor thing!

He will sit in the *barn*  
And *keep himself warm*  
And tuck his *head under* his *wing*,  
Poor thing!

## SPEECH TRAINING FOR CHILDREN

Great variety of interpretation is possible on the fourth line of each verse. Interest the children in the plight of the robin. This is excellent for agility of lips.

### EXERCISE 35

#### BE AS STILL AS ANY MOUSE

(for coördinations, tone, and vowel sounds also)

Be as *still* as any mouse,  
There 's a *baby* in the house,  
Not a *doll* and not a *toy*  
But a *laughing, crying* boy.

For coördinations: "Who in the class has a new baby sister or brother?" They may be singled out and honored by pulling their chairs inside the ring or coming to the front seats. All should hold an imaginary baby and rock to time, as they repeat the verse.

For lip-reading: since the words and combinations are very familiar. Playing that the baby is asleep on a chair in your midst, see if the class can say the familiar words without waking it up, without, in fact, making a sound.

### EXERCISE 36

#### CURLY LOCKS

(for vowel and consonant position and tone also)

Curly-locks, Curly-locks, wilt *thou be mine?*  
Thou *shalt not* wash dishes, nor shalt thou *feed swine*,  
But sit on a cushion and *sew a fine* seam,  
And *feed* upon *strawberries*, sugar, and cream.

## GIVING EXERCISES

Drill the following sentinel words in groups:

For vowel sounds:   sew—fine—seam

seam—fine—sew

you—be—mine

mine—be—you

For consonant sounds:   feed—swine

sit—cushion

sew—fine

feed—strawberries.

## RESONANCE

### EXERCISE 37

#### HUMMING

(for the location of various vibrating chambers)

The children are asked:

1. To hum until the lips "tickle."
2. To say the word "engine" so that the hard palate and forehead vibrate.
3. To say "angry" so that the throat and nose vibrate.
4. To say "amble" so that the throat and lips vibrate.
5. To say "enemy" so that the nose and lips vibrate.
6. With fingers on cheek bones below eyes to say "thumb-numb-prong," very connectedly.

These exercises should be persisted in until the children really feel the vibration. They should then be

## SPEECH TRAINING FOR CHILDREN

asked to think up other words having the same effect.

### EXERCISE 38

#### LITTLE JACK HORNER

(for tone also)

Little Jack Horner  
Sat in a *corner*,  
*Eating* his Christmas pie.

He put in his *thumb*  
And pulled out a *plum*  
And said, "What a *good boy am I!*"

Excellent for "n" and "m" sounds. Have the vibrations described as in 37. Remind them to force air through nose and prolong final m in thumb, plum, and am.

Christmas must not be pronounced Chris'mus.

### EXERCISE 39

#### A MONOTONE (By M. G. B.)

(for tone and pitch also)

The *bells* I hear  
With tone so clear,  
*Come* sing and pray  
They *seem* to say.

Should be practised on one tone (chant), imitating the vibrating of the bell and holding the finger on the

## GIVING EXERCISES

bridge bone of the nose. Prolong the consonant sounds.

### EXERCISE 40

#### PLAYING BELL

(for tone and 'pitch also)

Imitate bell, saying all words on one breath and monotone.

1. *bell, ill, ale, air, an.*
2. raise the pitch full tone and give again.
3. repeat.
1. *pool, pull, ole, all, owl.*
2. raise the pitch half a tone and repeat.
3. repeat.
4. lower pitch half a tone and repeat.
5. repeat.

### EXERCISE 41

#### DING, DONG BELL

*Ding, dong, bell,*  
*Pussy's in the well.*  
*Who put her in?*  
*Little Tommie Green.*  
*Who pulled her out?*  
*Little Johnnie Stout.*

Play that this is what the bell says. Notice the "l," "m," and "n" sounds. Practise the candle exercise on "who."

## SPEECH TRAINING FOR CHILDREN

### EXERCISE 42

#### PLAYING PEDDLER

The class are peddlers, calling from a wagon, first in unison, then singly:

"Strawberries," "Sweet-cider," "Water melon," "Pineapples," "Raspberries."

The tone should be sustained in singing.

Water correctly has the "a" as in all, not as in wasp.

### EXERCISE 43

#### THE HUNTER AND THE ECHO

Make horn of hands and "halloo" through them with singing voice:

1. As though you were far away.
2. As though half-way home.
3. As though in the room.
4. One half the class as in 1, the other half as echo.
5. As in 2, with echo.
6. As in 3, with echo.
7. Change the pitch and repeat the first 6.
8. The word "Halloo," with echo "*ah ha*," as in the first 6.
9. The words "come home," with echo, "*ah ha*."

A rather brassy tone must be used and good tone demanded, whether soft or loud. This can only be obtained by well-supported abdominal walls.

## GIVING EXERCISES

### TONE

#### EXERCISE 44

##### FOR EVERY ILL

For *every ill* beneath the *sun*  
There is a *cure* or there is *none*.  
If there *be one*, try to *find* it!  
If there *be none*, *never mind* it!

Practise with forward lips and exaggerated vowel sounds.

#### EXERCISE 45

(for coördination and vowel position also)

*Rain, rain, go away,*  
*Come again some other day,*  
*Little children want to play*  
*In the meadow on the hay.*

If given on a rainy day this exercise affords an excellent opportunity for exercise, as it is easy to march to. The leader of the line should make "Indian magic" to dispel the clouds by leading a very devious course.

The followers can assist the magic by emphasizing the vowel tone, "making music with their voices."

The word "children" is often mispronounced "childurn."



## SPEECH TRAINING FOR CHILDREN

### EXERCISE 46

#### ONE, TWO

One, *two*, button my *shoe*,  
Three, *four*, shut the door,  
Five, *six*, pick up sticks,  
Seven, *eight*, lay them *straight*,  
Nine, *ten*, a good fat *hen*.

Give with exaggerated vowel sounds and final consonants. This must not degenerate into singsong.

Practise the following in pairs:

four—door  
six—sticks (for lispers)  
eight—straight  
ten—hen (use diaphragm)

### EXERCISE 47

#### NOUGHT, ONE

Nought, one, my rhyme has begun,  
Two, three, birds in a tree,  
Four, five, bees in a hive,  
Six, seven, clouds in the heaven,  
Eight, nine, the very last line.

Use exaggerated vowel sounds and final consonants.

nought—one—begun  
three—tree (made alike by some foreigners)  
five—hive  
seven—heaven  
nine—line.

## GIVING EXERCISES

### EXERCISE 48

THERE ONCE WERE TWO CATS

(for tone and vowel position also)

There *once* were two cats of Kilkenny,  
Each thought there was *one* cat too *many*,  
So they *fought* and they *fit*  
And they scratched and they bit,  
*Till*, *excepting* their nails  
And the *tips* of their *tails*,  
Instead of *two* cats, there were n't *any*.

once—one	} Drill in pairs.
any—many	
fought—fit	
till—tails	
two—tips	

Probable mispronunciations: iny for any, minny for many.

### EXERCISE 49

OLD KING COLE

(resonance and vowel position)

*Old King Cole* was a jolly *old soul*,  
And a jolly *old soul* was he.  
He *called* for his pipe,  
He *called* for his *bowl*,  
And he called for his *fiddlers three*.

Good exercise for the exaggerated use of the lips.  
In the kindergarten or special classes a King can

## SPEECH TRAINING FOR CHILDREN

be appointed. Preferably he should be the one who has made the best attempt at pronunciation or one whom there is need to encourage.

Pipe-Bowl and the Three Fiddlers may also be personified and presented at court. The rest of the class and teacher may be Courtiers. A little court etiquette may be taught without jeopardizing their democracy. After all are presented to the King and have made their bows, the rhyme may be said in unison.

Drill specially for "f" and "th," seeing that the tongue is held between the teeth in "th." Watch for the final consonant in old.

Explain the meaning of the word "fiddler."

### EXERCISE 50

#### BUMBLEBEE AND CLOVER

Came a *roaring* *bumblebee*,  
Pocket full of *money*.  
"Oh *good-morning*, *honey* sweet,  
What's the price of *honey*?"

"Help *yourself*, sir," *Clover* said.  
"*Bumble*, you're *too* *funny*,  
*Never* *Clover* yet so *poor*  
She *must* sell her *honey*!"

Practise with very forward lips, with tone approximating singing tone, very warm and soft. Let the class attempt the trilled English r in "roaring" and "price."

## GIVING EXERCISES

Practise for resonance in "Bumble-bee, money, morning, honey." Practise the word "come" as the bumble-bee would say it, prolonging the final sound until the lips and teeth vibrate.

### EXERCISE 51

#### IF ALL THE WORLD

(for vowel and consonant position also)

If *all* the *world* were *apple-pie*  
And *all* the *sea* were *ink*  
And all the *trees* were *bread* and *cheese*,  
*What would we have to drink?*

Specially for training the muscles that bring the lips forward.

Probable mispronunciations: wur-ruld for world, shud for should.

### EXERCISE 52

#### WHISPERING

Whispering exercises are of value only when there is no straining.

1. Draw a deep breath and whisper, "ah." (Prolong.)
2. Draw deep breath and whisper, "Whispering, whispering leaves."

Repeat several times, or until the exercise can be done without strain.

## SPEECH TRAINING FOR CHILDREN

### EXERCISE 53

A WHISPER (By M. G. B.)

(for inflection also)

The *leaves* in autumn *whisper*  
To the *crickets* in the *grasses*.  
The snow in *winter* whispers  
To the *bare* limbs as it *passes*.  
But the *warm soft rains* of *spring*  
Whisper to *everything*.

It may be said with as soft a voice as possible, the sentinel words then whispered and then spoken. All children are inclined to whisper when asked to talk softly, as the latter is harder than the former, and requires better control of the diaphragm.

Contrast with the voice the first four and the last two lines.

### EXERCISE 54

THE FAT MAN FROM BOMBAY

(For resonance, consonant, and vowel position also)

There was a *fat man from Bombay*,  
*Who* was walking *one sunshiny* day,  
*When* a bird called a *snipe* flew away with his pipe,  
*Which* vexed the *fat man from Bombay*.

"Fat man from Bombay" with agile lips. "Who," "which," "when" with the blowing out the candle exercise No. 56.

Was is not correctly pronounced wuz.

## GIVING EXERCISES

### EXERCISE 55

#### THE MAN IN THE MOON

(For resonance, vowel, and consonant position also)

The *Man* in the *Moon*  
Came down too soon  
And asked his way to Norwich.  
He *went* by the *South*,  
And *burnt* his *mouth*  
Eating cold *plum porridge*.

An exercise for bringing the tone "forward." It should be taken with over-active lips.

*Man—moon—mouth*  
*Come—soon—south*

## PRONUNCIATION

### EXERCISE 56

#### BLOWING OUT THE CANDLE

(For coördination of the diaphragmatic muscles)

Hold your finger in front of your mouth and play it is a lighted candle.

1. Take a deep breath and blow it out slowly. Feel the air against your finger.
2. Take a deep breath and puff it out, using diaphragm with a kick.
3. Take a moderate breath and say (blowing against finger):

## SPEECH TRAINING FOR CHILDREN

Whisper (not wisper).

White (not wite).

Where (not were).

What (not wat).

Who (not wo).

Why (not wy).

Which (not witch).

Whether (not wether).

This exercise should be utilized wherever there are words containing a difficult "h" sound, and also for the strengthening of the diaphragmatic muscles.

If the carelessness persists, a little gentle teasing about this habit is often beneficial and not harmful, if addressed to the entire class.

### EXERCISE 57

#### THE DOG THAT GOT LOST (By M. G. B.)

Once upon a time two little girls lived in a house near the lake. They had a dog of which they thought everything. It was very hard for them to decide what they would name the dog. Alice wanted to name it Rover, but Mary Elizabeth said, "Let's name the dog *Tenny*, because you know how we love to go to *Tenny Park* in the summer." So the dog was named *Tenny*.

One day early in the Spring a team was going down *Mills Street*, and *Tenny* followed it and got lost, and so, of course, when they came home from school he was nowhere to be found. They went around calling, "Here, *Tenny*, *Tenny*," but it was no use.

## GIVING EXERCISES

They went up *Frances* Street to *Milton*, and up *Milton* to *Lake*, and they went up *Lake* to *Mound* and up *Mound* to *Park* and up *Park* to *Chandler* and up *Chandler* to *Brooke*. And all the time they kept calling, "Here, Tenny, Tenny, Tenny."

But when they got to *Brooke* they were very lucky for they met a man with an automobile who said that he would help them find the dog. "Do you think," said he, "that he would go over toward *Lake Monona* or do you suppose that he went in the direction of *Lake Mendota*? At least we will drive that way and come back by *Lake Wingra*. If that dog is in *Madison, Wisconsin*, we will find him."

And where do you suppose they found him? In the *Milwaukee* and *St. Paul* Railway yards. But Tenny was so glad to get home that he has never run away since that time.

For the correct pronunciation of familiar local names, streets, parks, rivers, and spots that the children know in your own community should be substituted for the names in this story.

After copying the story with the correct local names, note down the mistakes in your own pronunciation and that of the people around you. Read the story through to the class, letting the children guess the names of the places.

Remember that this is no exercise for the cultivation of memory.



## SPEECH TRAINING FOR CHILDREN

### EXERCISE 58

THE BEE THAT PUT OFF (By M. G. B.)

(Specially for vowel sounds)

Once there was a bee and he had just come out from a long winter's sleep. He rubbed his eye with his foot and looked around and said,

*"Buzz, buzz, buzz,  
Roses are red, violets are blue,  
Honey is sweet, and I'll gather some, too."*

But when he started to gather the honey he decided that it was rather hard work for the *Springtime*, and so he put it off. And *April* turned to *May*, and *May* turned to *June*, and *June* turned to *July*, and *July* turned to *August*, and *August* to *September*, and the flowers began to get sleepier and sleepier.

Every morning the bee would come out and say,

*"Buzz, buzz, buzz,  
Roses are red, violets are blue,  
Honey is sweet, and I'll gather some, too."*

But one night the clouds began to gather and the wind began to blow (and what would the wind say going through the bushes?), "*Woo, woo, woo.*" And it went through the tree-tops (How?), "*Whee, whee, whee.*" (You could n't guess that one, could you?), and the rain drops fell.

But in the morning it was bright and sunny again,

## GIVING EXERCISES

and the bee came out and said (What did he say?),  
"*Buzz, buzz, buzz.*"

But there he stopped, because the leaves of the roses had fallen, and the violets had been gone so long that even the Sun had forgotten the color of them.

And so he buzzed sadly away, and I don't know what became of him.

Object: Practise in the names of the months and of words beginning with "w" and "wh." Candle-blowing exercise should be used.

Bee, sweet, sleepier, whee, drilled together with emphasis on the position of the lips.

Drill all sentinel words with prolonged vowel sounds.

Possible mispronunciations: Aprul for April, August or Augest for August. Toosday for Tuesday, and Sat-day for Saturday, may also be added to this lesson.

## INFORMATION

### EXERCISE 59

#### SENTENCES FOR OCCASIONAL USE

(for inflection also)

1. Think quickly, speak clearly.
2. We wish to hear you when you speak.
3. Deaf children hear with their eyes.  
Blind children see with their ears.  
Can you hear with your eyes?  
Can you see with your ears?

## SPEECH TRAINING FOR CHILDREN

Explain meaning. Ask for varied inflections. Bring out the fact that hearing people also "hear" partly with their eyes and that people with sight also "see" partly with their ears.

### EXERCISE 60

#### MAKING ACQUAINTANCES

1. "I am going to make you acquainted with some very interesting people, Mr. Hard Palate and his wife, Mrs. Soft Palate. Mr. Hard Palate is easy to meet (touch your tongue to your hard palate). His wife is harder to meet. Say the word 'amble,' then start to say it, and just say 'amb.' You must be sure to keep your lips closed when you finish the 'b.' You feel something close in the back of your nose and mouth? That is Mrs. Soft Palate."

2. "Now we are going to play house. The nose is the hallway. The mouth is the dining-room. There is a door between them so that the breeze can blow through. When you shut your mouth and draw a deep breath you can feel the wind go through that door.

"The soft palate is a curtain hanging at that door. It keeps the air from getting out of the hallway into the dining-room if you do not want it to. And it keeps the food from getting out of the dining-room into the hall. Say 'amb' again and again; you are shutting and opening the curtain. Does it make a little clicking sound? That is the air backing up in the little room where the middle Ear lives.

## GIVING EXERCISES

"The brain is the library, store-room, and attic. Be very sure that you do not let it get full of trash."

3. Place hand on diaphragm, center front, lower ribs.

"There is a muscle here with a very large name. Can you remember it? Diaphragm. It is very nearly the one most important muscle in the body. We will call it old 'Father Diaphragm' because it rules the breathing and the speech. When Father Diaphragm is frightened, you say, 'I was so afraid that I could not speak.' When he is tired, you say, 'I was too tired to talk.' When he is 'nervous,' you hiccup."

4. "The diaphragm is like a strong horse, with all his strength. You can guide him if you know how. Like a horse he can move slowly as well as fast, and like a horse also he can move easily as well as hard. He is the horse on which speech rides. See that you train him so well that speech will have an easy ride and not bump up and down or get kicked off or get so feeble that it can't move."

### EXERCISE 61

(for consonant sounds also)

Children's speech should always be  
Plain to hear and plain to see.

The one rhyme to be memorized. Explain the meaning of the last line. The use of the eyes in seeing others speak, and also the courtesy and good breeding which demand the use of the lips so that others may see.

## **SPEECH TRAINING FOR CHILDREN**

Cover your eyes and say, "good morning," without voice. See if the children recognize it. Cover your entire face and say in a low voice, "It is a nice day." Ask them which is plainer.

Let some child try this for the benefit of others.

Write this rhyme on the board where it can stay for a few days. This rhyme should discover the lispers to you with very little trouble.

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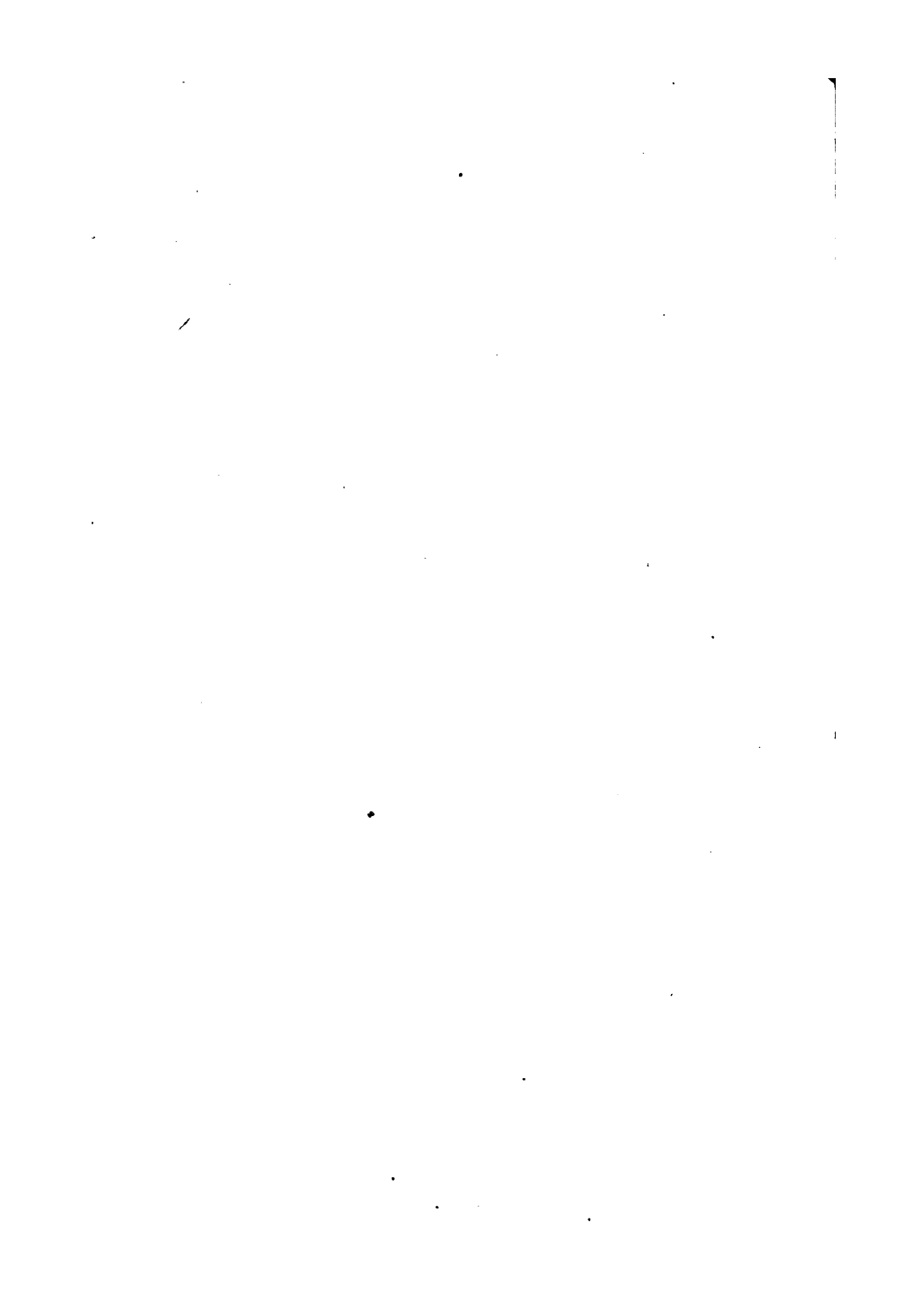
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